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FOREST TREES OF LOUISIANA
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HOW TO KNOW THEM

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OF
LOUISIANA
AND
HOW TO KNOW THEM

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BY

CAROLINE DORMON

Assistant in Public Relations
Division of Forestry
Department of Conservation

Bulletin No. 15

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New Orleans, La.

The hope for the future of Louisiana's forests and forest industries lies in a proper appreciation of the trees that make up these forests.

A warm climate, long growing season, and abundant rainfall have combined to give Louisiana a wealth of species, most of which produce abundantly and grow rapidly. Man, through his ignorance and often intentional neglect, has been the most important factor in preventing the development of our trees and forests.

That the people of Louisiana and the visitors to our State may know and rightly value our trees, this book is prepared in the confident belief that having this knowledge they will protect and foster trees and tree growth.

V. K. Irion

Commissioner of Conservation.

"TREE TIPS"

Leaves of all the elms are ''lop-sided'', that is, unevenly divided by the mid-rib. Linden leaves have this same characteristic (more marked in some species than others), but they are not shaped like elm leaves.

Remember that mulberry and sassafras often have leaves of three distinct shapes on the same tree.

In species where it is stated that male and female flowers occur on separate trees, do not look for fruit on every tree, for the male trees do not bear fruit. There is no way to distinguish between the trees except by the flowers.

The term ''hardwood'' does not necessarily mean that the wood of the tree is hard. It is simply a term meaning broadleaf trees. Pines, cedars, and cypress are not hardwoods, yet the wood of some of the pines is extremely hard; while the wood of the linden, a ''hardwood'', is very soft.

Except where described as evergreen, the trees listed in this book are deciduous; that is, they shed their leaves in the fall.

Many trees, such as cycamore, sweetgum, tulip-tree, witch-hazel, etc., may be identified when bare by the fruit pods, or husks.

In winter, when in doubt about a tree, break a twig and smell it. Many trees have a quite characteristic odor; for instance, sassafras and wild cherry.

In many hardwoods, such as the oaks and hickories, typical leaves do not often occur on the very lowest branches. Also, the leaves on young plants differ from those on older trees, which fact makes young trees difficult to identify.

One feature is seldom sufficient for accurate identification. One should observe manner of growth, location, bark, leaves, buds, and, when possible, flowers and fruit.

Pistillate flowers, known as the female flowers, produce the fruit; staminate, or male flowers, bear the pollen.

FOREWORD

THIS little manual has been prepared especially for the use of the amateur. Therefore, scientific terms have been avoided wherever possible. Now that schools and many organizations are taking up a serious study of trees, there is a growing demand for such a handbook.

The wonderful forests of Louisiana have enabled this state to lead in lumber production. In addition to these valuable trees, there are others famous for their beauty. Every citizen should know these trees by name, just as he knows corn from sugarcane, or cotton from okra. An earnest effort has been made to give at least one distinguishing feature of each tree. Sometimes there are a number of quite similar species in one family, which tends to confuse the amateur. This is particularly true of the lindens; but there are unmistakable family characteristics, and by studying these, one is at least enabled to say, "that is a linden." Where a more detailed description of a species is desired, the student is referred to Sargent's Manual of Trees of North America.

The classification conforms to that of the last Check List issued by the U. S. Dept. of Agriculture.

This is not a complete list of trees of Louisiana. About 150 species have been recognized as native to the state. This book contains only those that have commercial value, that are very common, or that are particularly odd or beautiful.

Many of our native trees are far more attractive than some of those brought from other lands, and if these species were used more in planting, our parks and highways would take on an individual charm, typical of Louisiana alone. But this does not mean that promiscous digging in the woods is to be indulged in. Shrubs and trees should never be removed from a roadside or camp-site; and under no circumstances should a plant be taken without the permission of the land-owner. Most of our ornamental trees may be bought from a nursery, as a number of dealers now handle native stock.

Each individual in the state should feel a personal responsibility in preserving those of our trees which are in grave danger of being destroyed by the ruthless breaking of flowers and berries. It does not require close observation to see that dogwood, redbud, fringe-tree, the berry-bearing hollies, and other highly ornamental species are rapidly disappearing from along highways and areas easily accessible to cities. It must be made a personal matter: "*I* will 'look and leave', and try to persuade others to do the same".

As to protecting pine forests from fire, this really means caring for common property; for we all receive benefits from the forests, use their many and varied products. In addition to this, it is vital to the general welfare of the state that we keep forests growing on our poorer lands. Fires impoverish the soil, hasten erosion, injure mature trees, and worst of all, kill the little pines which promise a future supply of timber.

This manual will be distributed free to teachers, and to others who sincerely want to learn more about the trees of their state. Those who have prepared and published this booklet will feel that the time and money involved have been well spent if it helps to teach our people to know the trees as friends, and to protect them from fire and other enemies.

ACKNOWLEDGMENTS

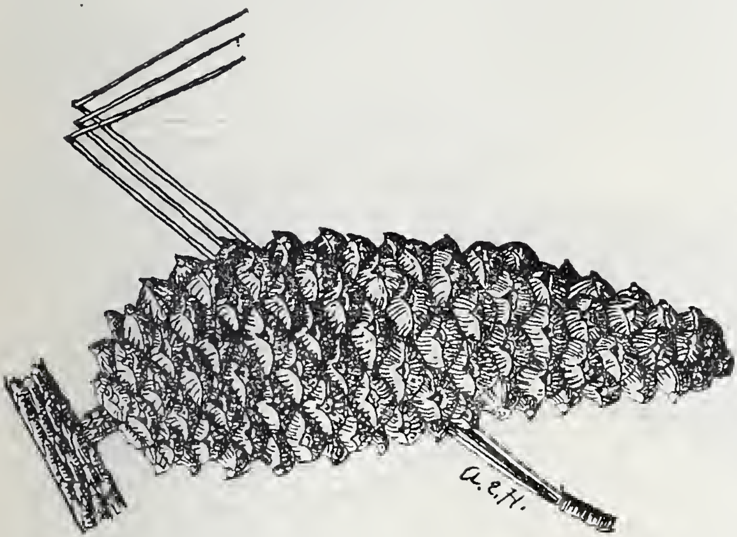
Grateful acknowledgment is made to the following for their valuable assistance in compiling data, and in gathering many interesting facts about the trees of Louisiana: to the following members of the U. S. Forest Service, W. R. Mattoon, W. W. Ashe, R. D. Forbes, the late George B. Sudworth, and for original drawings of the trees, to Mrs. A. E. Hoyle; to the late C. S. Sargent; to the late R. S. Cocks, and George Williamson, of Louisiana; and to the members and associates of the Louisiana Department of Conservation.

LONGLEAF PINE

(*Pinus palustris* Mill.)
(Pine family.)

The longleaf pine is distinctive and beautiful; a virgin forest an unforgettable sight. It is an intolerant tree, crowding out all other growth. The trunks are tall and straight, with no branches to a great height, giving to the woods a clean, open look. The young trees are also very attractive, with their large clusters of long, lustrous needles. Mature trees are usually 100 to 130 feet in height, with slightly tapering trunks, often three feet in diameter.

Longleaf pine produces quantities of resin of a high quality. Because of this, and the fact that it grows in pure stands over large areas, it has been the most important of all southern pines to the naval stores industry.



Longleaf does not grow as rapidly as loblolly and shortleaf, neither does it reproduce as freely; but where seed-trees were left on cut-over land, where fires were not too frequent, and hogs not too plentiful, there is now a good stand of young trees.

Winn, Grant, La Salle, Natchitoches, Rapides, Vernon, Beauregard, Washington, Tangipahoa, St. Helena, St. Tammany, and Allen Parishes were once largely forested in longleaf; also parts of several other parishes. Pure stands of longleaf occur on sand hills and the heavier soil of level uplands; seldom found growing in clay soils, and never in swamp or flood-plains of streams.

The *leaves* are from 12 to 15 inches long, in clusters of 3, and gathered toward the ends of the thick, scaly twigs.

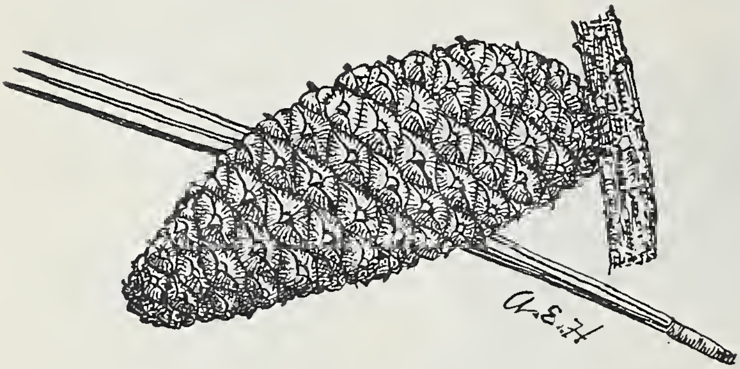
The *flowers,* appearing in early spring before the new leaves, are rose-purple. The *cones,* or burrs, are 6 to 10 inches long.

The *bark* is light brown, and in thin flat scales. The *wood* is hard and strong. Nearly all heart and full of resin, it is very lasting. Tests by the Department of Agriculture have proved it to be the strongest wood for structural purposes. Very long timbers can be cut from the tall, straight trunks. Because of the pure stands, the cost of logging is reduced to a minimum. For these many reasons, these pines have been eagerly sought by timbermen, and were the first to be cut.

SLASH PINE (Cuban Pine)

(Pinus caribaea Mor.)
(Pine family.)

This pine is not commonly known in Louisiana, but because of its many valuable qualities, it is rapidly coming into its own. Because of its abundant reproduction and exceedingly rapid growth, it is replacing longleaf in many localities. It may be distinguished from longleaf, which it resembles, by its shorter leaves, which are distributed along the stem, rather than in decidedly terminal clusters, as in longleaf. The tree is often 100 feet high, with a round-topped head, and a trunk 2 to 3 feet in diameter. It grows naturally only east of the Mississippi River, but experiments in planting have proved that it will grow well throughout the state.



It will grow in wet, poorly-drained soils, a fact that sets it apart from all of our other pines, except loblolly.

The *leaves* occur in clusters of 2 or 3, are from 8 to 12 inches long, and lustrous.

The *flowers* appear in late winter, the male dark purple, the female pink. The *cones* are usually 4 to 6 inches long, brown, and glossy, the thin scales armed with fine prickles.

The *bark* separates freely on the surface into large, thin scales. The *wood* is quite similar to that of longleaf, being sold as such, and used for the same purposes.

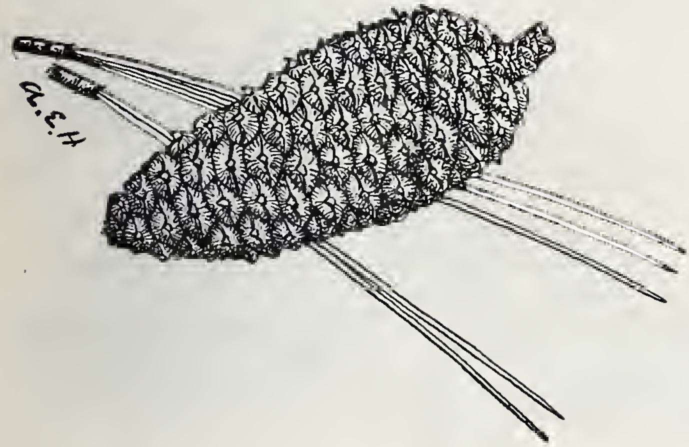
There is little doubt that in the future this will be one of the most important pines in Louisiana. It will certainly be favored for artificial planting. In addition to its splendid reproduction, rapid growth, adaptability, and valuable wood, it produces resin even more freely than longleaf.

LOBLOLLY PINE

(Pinus taeda L.)

(Pine family.)

Loblolly pine occurs in almost every part of the state, growing on either wet or dry ground. It is of rapid growth, and does a good part in bringing back cutover lands. It is often called old-field pine. It is sometimes incorrectly called shortleaf, though it is easily distinguished from the latter by the bluish-green color of the foliage, longer straws, and darker, rougher bark. It is found growing with shortleaf pines, and with deciduous trees.



The *leaves* are 6 to 9 inches long, are borne 3 in a cluster, and are a rich, dark green. The tips of the branches turn upward.

The male *flowers* are borne in short, crowded clusters, yellow; the female are solitary or clustered, yellow, and borne several inches from the end of the shoot. The *cone* is 3 to 5 inches long. The seeds have inch-long wings, which accounts for their wide distribution. It also bears a heavy seed crop almost every year. Sometimes an old field will come back to loblolly, when the longleaf seed trees are nearer. The longleaf seeds are heavier, and not so easily carried by the wind.

The *bark* is dark brown, thick, and deeply furrowed. In old field stands the *wood* is coarse-grained, and not very strong. In slow-growing, forest specimens, the wood is of good quality. It is much used for building material, particularly interior finish, and for pulpwood. It is also used for fuel, and other purposes.

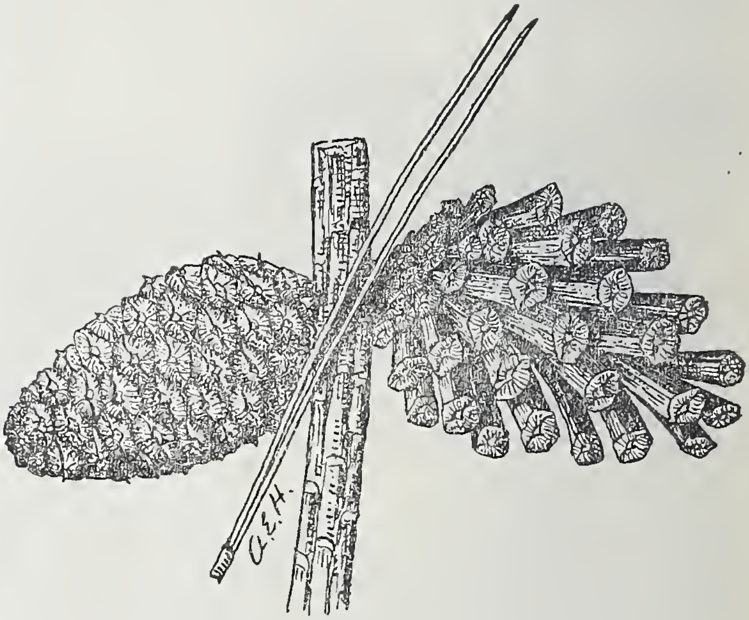
SPRUCE PINE

(*Pinus glabra* Walt.)
(Pine family.)

This pine, which is very restricted in its distribution in this state, is quite different from other Louisiana pines, more closely resembling the northern and eastern types. It is easily identified by leaves and bark. The young trees are very shapely, perfect little ‘‘Christmas trees.’’ It sometimes becomes rather large, occasionally as much as 100 feet in height, with a trunk 3 feet in diameter. It occurs only east of the Mississippi River, in the ‘‘Florida Parishes’’; most abundant in Washington Parish. It grows on sandy banks of streams, with other shortleaved pines, and hardwoods.

The lustrous, dark-green *leaves* are borne in clusters of 2, are from 2 to 3 inches long, and are soft, slender, and twisted.

The male *flowers* are yellow, in short crowded clusters; the female fewer, and much less conspicuous. The *fruit* is a tiny cone, from ½ to 2 inches long, with thin scales, and rather lustrous. They are sometimes borne in clusters of 2 or 3. They cling on the tree for several years.



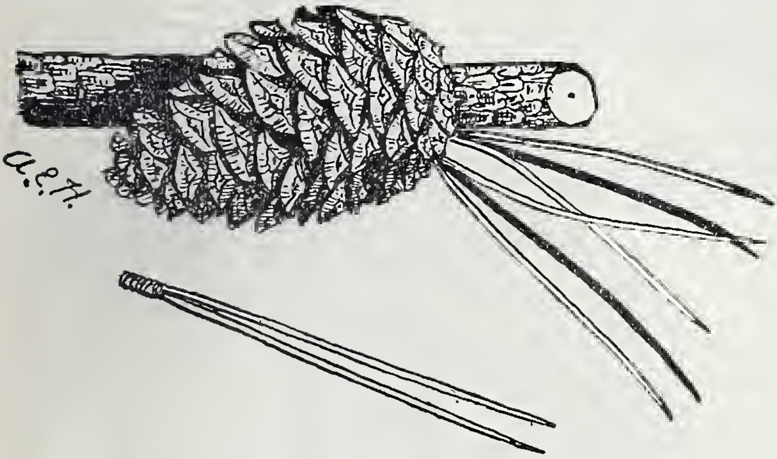
The *bark* on the upper part of the trunks ,and on young trees is grey and almost smooth, entirely different from that of any of our other pines. On old trunks it becomes darker, and irregularly fissured. The *wood* is light, soft, close-grained, brittle, and not very strong, somewhat similiar to white pine. It makes attractive interior finish, and is excellent for the manufacture of paper pulp, but is available in only small quantities.

SHORTLEAF PINE

(*Pinus echinata* Mill.)

(Pine family.)

Shortleaf pine, also known as old-field pine, yellow pine, rosemary pine, etc., is widely distributed through the state. Sometimes mixed with hardwood types, and sometimes in pure second-growth stands, it is found in the hills and on bluff lands. When grown in thick stands, the trunks are tall, straight, and clean. This pine and loblolly pine have reforested the old fields in the South that were thrown out of cultivation after the Civil War. While virgin longleaf was plentiful, this crop of young timber was rather scorned by the lumbermen, but it now supplies a large per cent of the pine lumber of the southern states. Because of its readiness to reforest, it is considered a valuable type of pine. A few are killed by pine-borers, but its only really serious enemy is fire. A favorable characteristic is its tendency to sprout after having been killed back by fire.



The *leaves* are in clusters of 2 or 3, from 3 to 5 inches long, slender, flexible, and often twisted. This pine may be distinguished from loblolly at quite a distance, by the yellow-green foliage, which is not nearly so luxuriant looking as that of loblolly.

The *flowers* appear in spring, the male in short, crowded clusters, pale purple; the female in clusters of 2 or 3, pale rose color, much less conspicuous than the male. The *fruit* is a small cone, 1½ to 2½ inches long, with thin scales, generally in clusters, and often clinging to the twigs for 3 or 4 years. The last-named trait adds to the characteristic appearance of the tree.

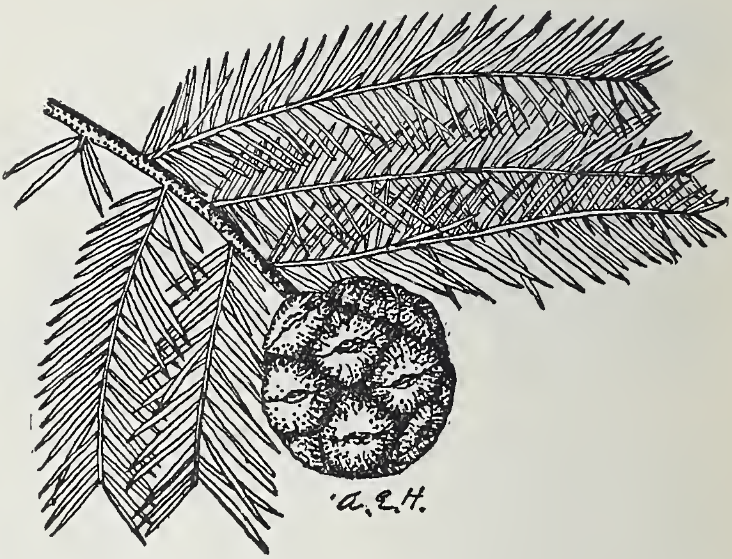
The *bark* is light reddish-brown, thin, and broken into irregular plates. It is not nearly so deeply fissured as that of loblolly. The *wood* of old, forest-grown trees is hard and strong, and is often classed with longleaf. As it is fine-grained and less resinous than longleaf, it is used largely for interior finish and paper pulp. It is also used for general construction, excelsior, cooperage, mine props, and other purposes.

CYPRESS

(*Taxodium distichum* Rich.)

(Pine family.)

This tree, sometimes known as bald cypress, is found in deep swamps where water stands for at least a part of the year. But it will grow luxuriantly where water never stands, if the soil is rich and moist. The tree is oddly attractive, and easily recognized by its fern-like foliage, fan-shaped top, and flaring base. Another characteristic feature is the way the roots push up above the water level for air, forming irregular points called "knees". This only occurs where water stands about the base of the tree for at least a part of the year. This is one of our largest trees, sometimes attaining a height of 130 feet, and a diameter of 10 feet. A very fine specimen has been left uncut in the Coochie Brake, near Winnfield. Scientists have estimated that this tree is about twenty-five hundred years old. It is found in favorable localities over the State, often growing with tupelo gum, water locust, and other swamp species. A pure stand of cypress, particularly when draped in streamers of Spanish moss, is most impressive.



The tiny *leaves* are set evenly and closely along opposite sides of the twigs, the clusters resembling small fern fronds. In the Autumn these branchlets fall, with the leaves still adhering.

The drooping panicles of staminate *flowers* give to the bare trees a delicate purple tinge in early spring. The flower buds, which appear in late fall, are silvery-grey during the winter. The *fruit* is a rounded cone, or "ball," about 1 inch long. It encloses little seeds, which have wings nearly ¼ inch long.

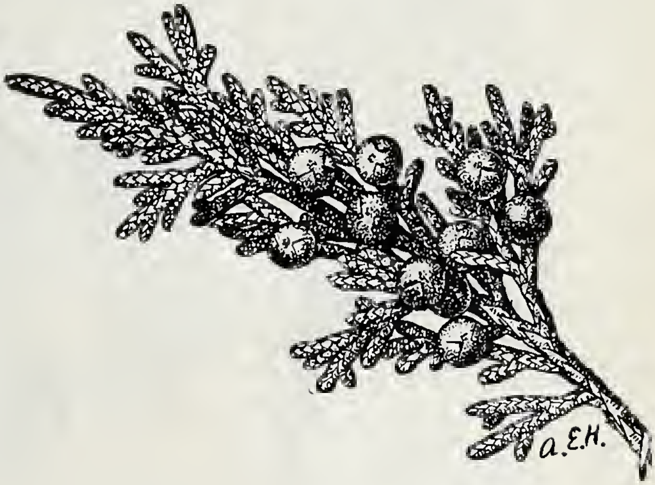
The *bark* is silvery to cinnamon-red, and finely divided by numerous longitudinal fissures. On old trees the bark often forms loose flakes. The *wood* is light, soft, easily worked, and extremely durable in contact with weather and soil. Hence it is much in demand for shingles, well-curbing, posts, poles, crossties, boat and ship building, and exterior trim of buildings. It has been popularly called, "The wood everlasting."

RED CEDAR

(*Juniperus virginiana* L.)

(Pine family.)

This is a shapely tree, particularly attractive when laden with its masses of blue berries. It is found on dry slopes and ridges in many parts of the state, rarely in pure stands, forming what are known as "cedar-brakes." It is a vigorous evergreen, and is sometimes planted as an ornamental tree.



There are two kinds of *leaves,* both usually found on the same tree. The commoner kind is dark green, minute, scale-like, and clasping the stem in four ranks, so that the stem appears square. The other kind, usually appearing on vigorous young shoots, is awl-shaped, quite sharp-pointed, spreading, and whitened. Very young trees bear this kind, only, which gives them a different appearance from the old trees. The *flowers* appear at the ends of minute twigs, male and female on separate trees. In very early spring, the male tree takes on a golden color from the numerous tiny catkins, pollen-laden. The *fruit* is pale blue, usually with a white bloom. The tiny berries enclose one or two seeds in rather sweet flesh. In winter they are eaten greedily by many birds.

The *bark* is very thin, reddish-brown and grey, peeling off in long, shred-like strips.

The beautiful *wood* is used to good effect in the making of cedar chests. The heart is wine-red, and the sapwood pure white, this color combination being emphasized in cabinet work. The wood is soft, of even texture, aromatic, these qualities making it very desirable for lining clothes-closets, and for making pencils. It is extremely durable in contact with the soil, therefore in great demand for posts, poles, etc. In addition to this, it grows rapidly. There should certainly be a few of these trees growing on every farm.

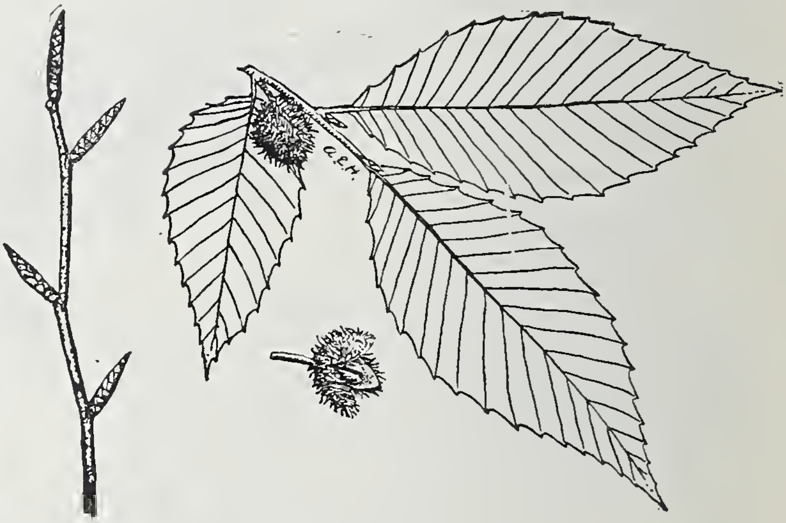
BEECH

(*Fagus grandifolia* Ehrh.)

(Beech family.)

The beech, one of our most beautiful forest trees, occurs on creek bottoms and rich hillsides over the state. It usually grows with other hardwoods, but sometimes, on well-drained bottoms, pure stands are found over small areas. On good land it grows quite large, often reaching a height of 100 feet, with a diameter of 3 feet. The long horizontal branches make a delightful shade. The tree is attractive, and easily identified at all seasons of the year.

The *leaves* are alternate, 3 to 4 inches long, pointed, with a well-toothed margin. The perfect parallel veining is striking. In autumn the leaves turn a clear golden yellow, then a rich, bright brown, making a lovely carpet when they fall. The brown-silk *winter-buds* are slim and pointed, and nearly an inch long.



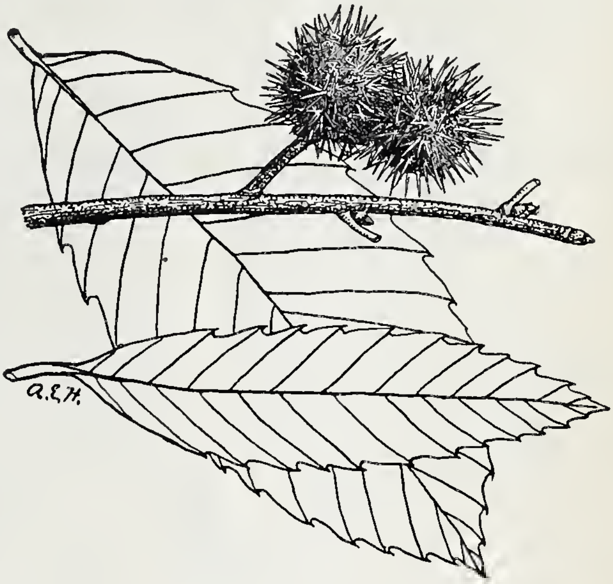
The *flowers* appear when the leaves are about one-third grown; the male in small, round heads, on long stems; the female in a tiny cluster at the end of the stem. The *fruit* is a prickly burr, which usually contains two little brown, three-sided nuts. The kernel is sweet and good, but so small it is not often eaten by human beings, but is relished by animals and some of the larger birds.

The *bark* is most distinctive, maintaining an unbroken dappled-grey surface throughout the life of the tree. This smooth expanse is so tempting that every owner of a pocket-knife must needs carve upon it. It is often called "the initial tree". The *wood* is close-grained, hard, strong, and tough, but not lasting when exposed to weather or soil. It is largely used for furniture, flooring, tools, and novelty wares. It is the preferred wood for laundry appliances, as it does not swell and shrink with alternate wetting and drying.

CHINQUAPIN

(Castanea floridana Ashe.)
(Castanea alnifolia floridana Sarg.)
(Beech family.)

This is an attractive and valuable tree, though usually known only for its nuts. In the open it assumes a beautifully rounded form, with drooping branches. The stout trunk, sometimes as much as 2 feet in diameter, is usually straight and clean for 10 or 12 feet from the ground. When the main stem has been cut back to the ground, often sprouts come up and form a bushy clump of small trees. In the central and northern part of the state, this tree is common on sandy hills and ridges, and is occasionally found growing in richer soil.



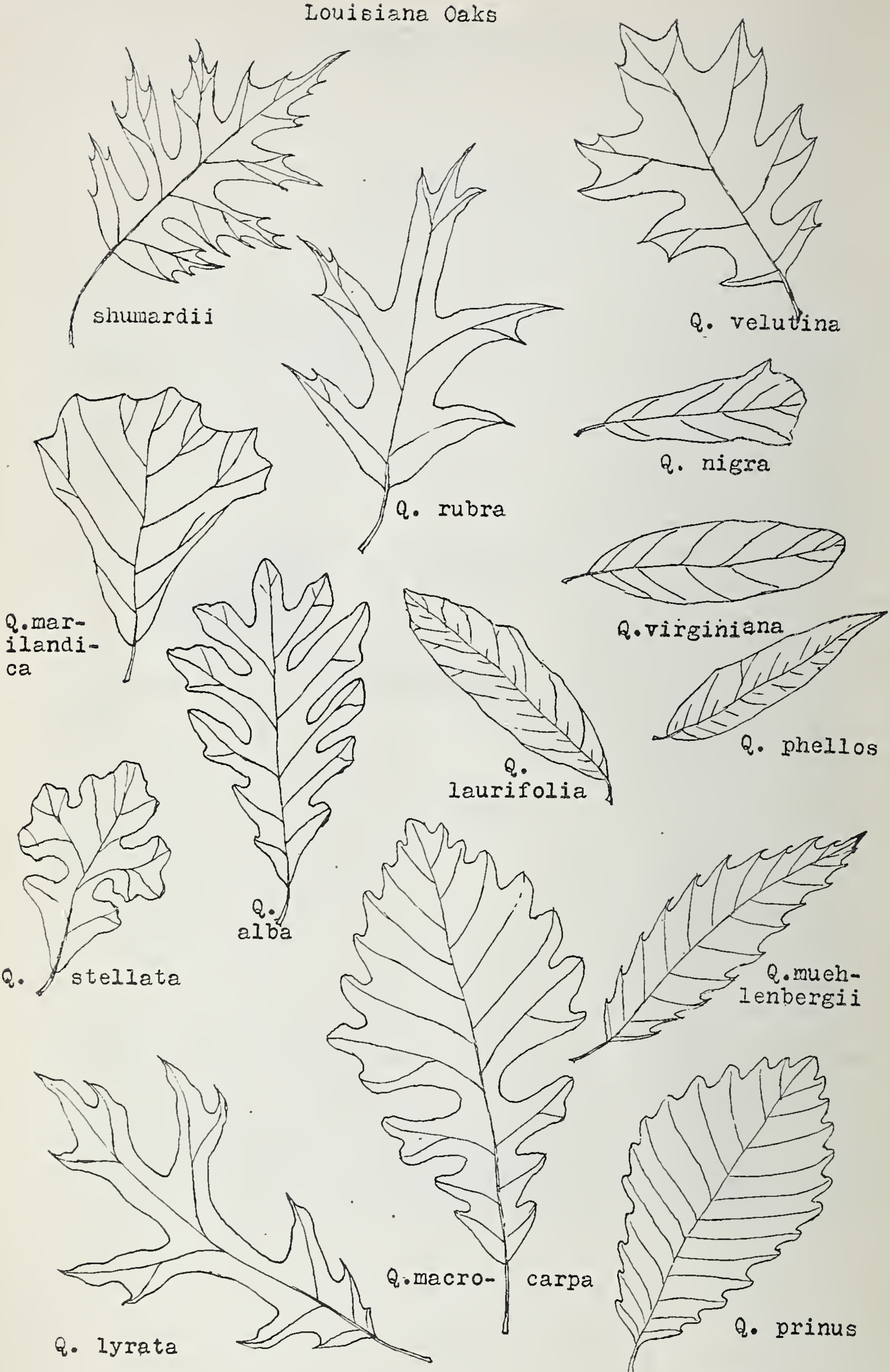
In April the creamy-white *flowers* cover the tree, when it becomes unusually attractive. The pollen-bearing flowers are from 3 to 6 inches long, soft and drooping; the fruiting flowers, borne at the end of the stem, are small and inconspicuous. The *fruit* is a prickly burr, with one shining brown nut, which contains a sweet kernel. The nuts are prized by children, and are gathered in quantities when the burrs pop open in September and October. This is an excellent tree for hog pastures, as the nuts are fattening.

The slender, pointed *leaves* are 3 to 5 inches long, parallel-veined, and coarsely toothed. The *bark* is light-brown and grey, slightly furrowed, and, on old trees, broken on the surface into plate-like scales.

The *wood* is light, hard, strong, and coarse-grained. It is very lasting in contact with the soil, therefore highly prized for fence-posts. It is also sometimes used for cross-ties. The chinquapin is a tree of many local uses, and there should certainly be some growing in every farm woodland.

It is probable that other species occur locally.

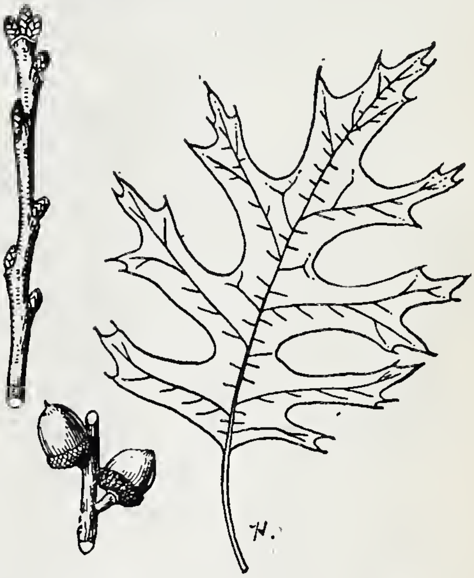
Louisiana Oaks



TEXAS OAK. SHUMARD RED OAK

(*Quercus shumardii* Buckl.
formerly *Q. texana* Sarg.)
(Beech family.)

This charming and valuable oak seems to have received little recognition. It is common on alluvial lands and other deep, rich soils. The tree is quite distinctive, and when in leaf may be identified at a glance. In favorable locations, it reaches a height of 120 feet, with a straight trunk 5 feet in diameter.



The *leaves* are beautifully cut, shining, dark green above, paler below. It is quite easy to distinguish it from other red oaks by its deeply lobed leaves, with their many sharp points. There are usually 7 lobes, but occassionally 5. The leaf-stems are particularly long, slender, and clean; the leaves never very large, usually not over 6 inches long. The whole effect is graceful and attractive.

The *flowers* come in slender, drooping catkins. The *fruit* is about 1 inch long, light-brown acorn, sometimes with narrow stripes, and usually borne singly.

The *bark* is dark brown, thick, ridged, and the surface broken into small hard plates, rough and scaly. The *wood* is heavy, hard, strong, close-grained. It is manufactured into lumber and used for many purposes. It is considered more valuable than the wood of the northern red oak.

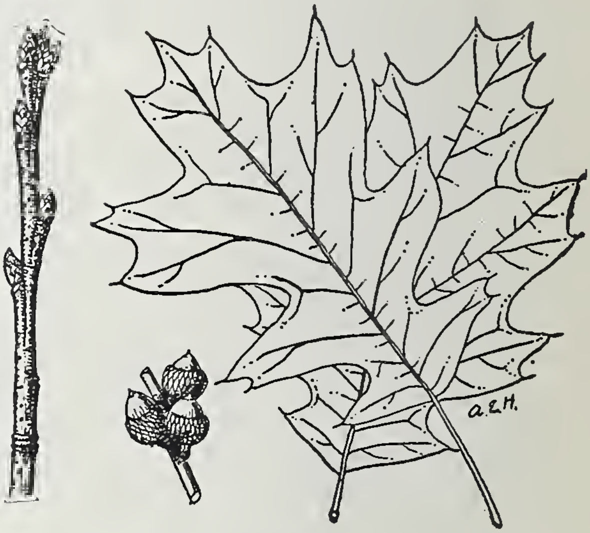
BLACK OAK

(*Quercus velutina* Lam.)

(Beech family.)

This big-leaved oak is one of a group of several commonly called "red oak". Farther north, it is known as yellow-bark oak. It is usually about 80 feet in height, rarely as much as 100, with a trunk from 1 to 3 feet in diameter. On dry, sandy hills, where it is common, it does not grow as large as others of this group; but occasionally it occurs at the edge of a swamp, and in this location it becomes a very large, handsome tree, with a tall, straight trunk. It grows more slowly than others of the group. It occurs over the state.

The leaves are alternate, simple, 3 to 10 inches long, and 3 to 8 inches wide, being particularly large on young shoots. They are glossy green above, paler below, usually a little downy, and with conspicuous rusty hairs in the forks of the veins. The lobes are wide, usually with several points, but the leaves vary greatly as to the depth of the lobing. When the leaves first unfold in the spring, they are deep red, becoming silvery in a few days. They are usually seven-lobed. The winter-buds are very large, and woolly.



The *flowers* come in March, pale, drooping catkins touched with red. The *fruit* is a broad acorn about 1 inch long, brown, and enclosed for at least half its length in a thin, scaly, brown cup.

On young branches and very young trunks, the *bark* is smooth and light, on older trunks becoming almost black, extremely rough, and very deeply fissured. The trees that grow on sand hills have much rougher bark than those that occur on lower, richer ground. The bright yellow inner bark is quite distinctive. It is used in tanning, as a dye, and in medicine. The *wood* is hard, strong, heavy, and coarse-grained. It is used for crossties, and sometimes sawed into lumber, but is chiefly used for fuel.

RED OAK

(Quercus rubra L.)

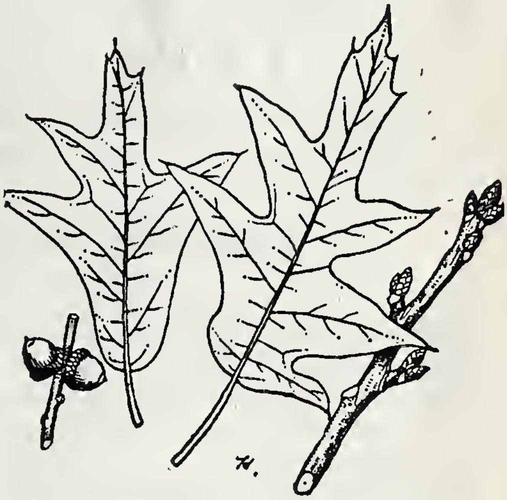
(Beech family.)

This is the southern red oak. The name, red oak, is applied to a number of species, but this one may be distinguished by characteristic leaves, bark, etc. It makes a large tree, with spreading branches, forming a broad, open head. It grows rapidly, and is a rather attractive shade tree. It is of more spreading habit than others of this group. It is usually 70 or 80 feet in height, and 2 or 3 feet in diameter, though sometimes much larger. On hills and uplands over the state, this species occurs more frequently than any other oak. It is found growing with other upland hardwoods, and sometimes with shortleaf pine.

The *leaves* vary in form, usually having five deeply-cut, rather irregular lobes, with long, sharp points. They are lustrous green above, covered beneath with whitish down. This characteristic feature is quite noticeable in a high wind.

The *flowers,* which appear with the unfolding leaves, are borne in slender drooping catkins. The *fruit* is a small, rounded acorn, about ½ an inch long, and set in a thin, saucer-shaped cup.

The rough *bark* is dark brown, and divided by fissures into broken ridges. The *wood* is hard, strong, coarse-grained, not durable, light red, with lighter colored sapwood. The wood is better than that of some red oaks, and is used for rough furniture, construction, crossties, and fuel.



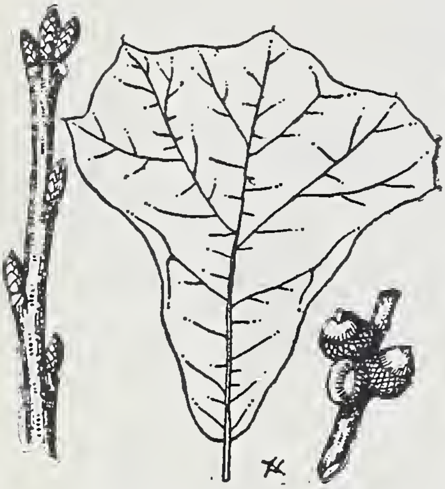
The bark is used in tanning leather, and occasionally for medicinal purposes.

BLACK-JACK OAK

(Quercus marilandica Muench.)

(Beech family.)

This tree is commonest on cut-over longleaf pine land, where fires have been frequent, and the soil is poor. Such areas come back largely to black-jack, sand-jack, and post-oak-runners. Black-jack oak does not grow large, seldom reaching a height of over 50 feet. If one could always look at it from above, never from beneath, it would be much admired. The foliage is attractive, but dead twigs and branches are very persistent, giving it a scraggly, untidy appearance.



The *leaves* are from 4 to 10 inches long, broadly wedge-shaped, of leathery texture, glossy green on the upper surface, lighter underneath.

The *flowers* come with the young leaves, and, like them, are pink. The *fruit* is an acorn about ¾ of an inch long, yellow-brown with darker stripes, enclosed for half its length or more in a thick, light-brown cup.

The *bark* is rough, nearly black, and broken into small, hard, scales. The *wood* is heavy, hard, and strong. It is used mostly for fuel.

SAND-JACK OAK. BLUE-JACK OAK

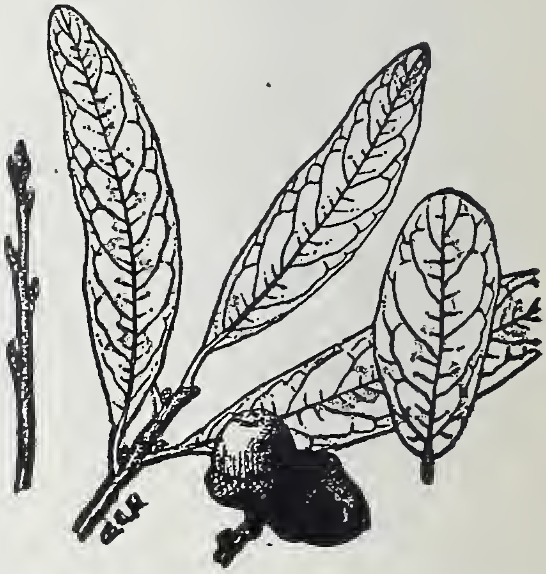
(Quercus cinerea Michx.)

A tree growing on dry sand hills, usually not more than 25 feet in height and 5 or 6 inches in diameter, but sometimes as much as 1 foot in diameter.

The *leaves* are oblong-lanceolate, pale blue-green above, almost white beneath.

The early spring is the most attractive season for this tree, when it is covered with the light-red *flowers* and young leaves.

The *bark* is similar to that of black-jack. The *wood* is hard, strong, close-grained; probably used only for fuel. It is reddish-brown.

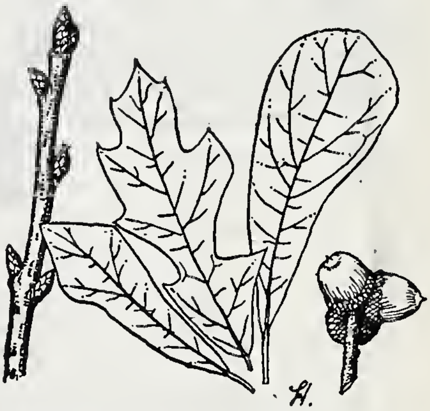


WATER OAK

(Quercus nigra L.)

(Beech family.)

Because of its shapliness and rapid growth, this oak is popular as a shade tree. It beautifies the streets of many southern towns, largely replacing the live oak as the Gulf Coast region is left behind. It is not a true evergreen, but the leaves cling until well into the winter, falling gradually. It usually attains a height of about 80 feet, and sometimes a diameter of 4 feet. This tree occurs in large numbers in woods bordering swamps over the state.



The *leaves* are quite variable in shape but most of them are wedge-shaped, being much broader near the point. Often they are lobed. They are dark-green, paler below, and usually 2 to 3 inches long.

The *flowers,* which are light-red catkins, appear in March with the young leaves. The *fruit* is a small acorn, light brown, often striped, and held in a thin saucer-shaped cup.

The *bark* on young trees is smooth and light colored, becoming covered with smooth, close scales as the tree grows older.

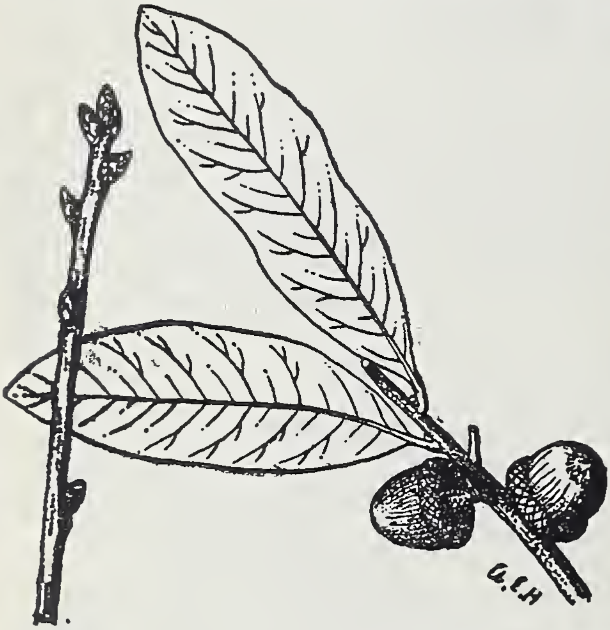
The *wood* is heavy, hard and strong, and is used for piling, crossties and fuel.

LAUREL OAK

(*Quercus laurifolia* Michx.)

(Beech family.)

Of the group of trees commonly called "water oak", (see water oak), this is the showiest, and comes the nearest to being evergreen. It is difficult to understand why it has not been planted as a shade tree more than other species so used. It is not a common tree, but has been definitely identified in Natchitoches, Washington and Bienville Parishes, and probably occurs in others. It is found growing in rich soil at the edge of swamps. It makes a large and shapely tree. The *leaves* are 3 to 5 inches long and about an inch wide, being broader and less pointed than those of willow oak. They are thin, dark green, very glossy above, lighter and duller beneath. They fall in spring, leaving the trees almost bare just while the young leaves are coming out.



The *flowers* are in drooping, reddish catkins. The fruit is a small acorn, about ½ inch long, with a thin, saucer-shaped, brown cup.

The *bark* on mature trees is nearly black, and deeply fissured. The *wood* is hard and strong, and probably used for the same purpose as that of water oak.

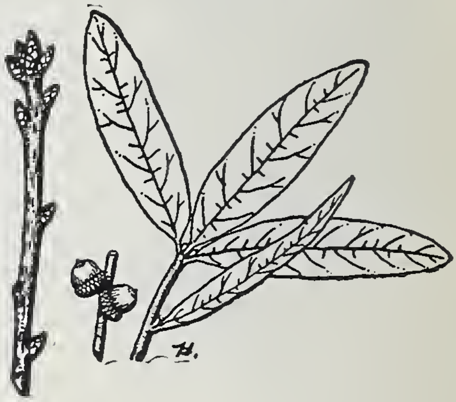
WILLOW OAK

(*Quercus Phellos* L.)

This is another tree often called "water oak" and "pin oak." It is common in rich woods over the state, usually found in the vicinity of streams, but sometimes occuring in "flat-woods." It grows rapidly, and is occasionlly planted as a shade tree.

The slender willow-like *leaves* are 2 to 4 inches long, and pointed. They fall during early winter. The *fruit*, a small, brown acorn, is relished by a number of animals and larger birds.

The *bark* on young trees is smooth, light grey; on older trees, brown, roughened, and divided into narrow ridges. The strong, hard *wood* is used for cross-ties, and occasionally for construction.

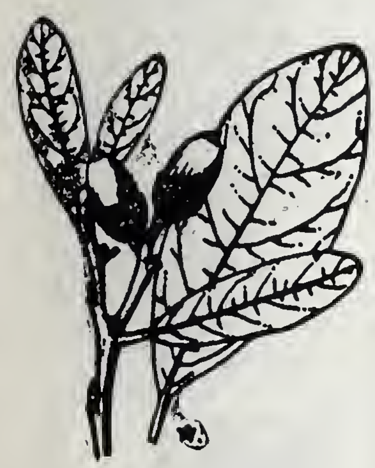


LIVE OAK

(*Quercus virginiana* Mill.)

(Beech family.)

Outside of commercial circles, the live-oak is Louisiana's best-known tree. Many are the romantic legends that have been woven about it. In the minds of most people live-oaks and Spanish moss are closely associated with the name, Louisiana. It is in the southern part of the state that these trees are to be seen in all their glory. With their thick, strong trunks, and spreading branches forming a canopy sometimes a hundred feet across, they are very striking. Often the trunks are 6 feet in diameter, dividing into several very large branches, each the size of an ordinary tree. These are usually almost horizontal, drooping at the ends. In very old trees, the tips of the branches sweep the ground. This oak is rather slow-growing, but so long-lived it might be considered a permanent tree. It is the favorite shade-tree of Louisiana, and well deserves its popularity. It will grow in any part of the state, though its natural habitat is near the Gulf coast.



The French settlers of Louisiana very appropriately called this tree "chene-vert".

The evergreen *leaves* are from 2 to 4 inches long, thick, leathery, and glossy.

The *fruit* is a slender acorn about 1 inch long, dark brown and lustrous, and set in a downy, light-brown cup. Unlike other acorns, it has a sweet kernel. Every autumn the Indians used to come down to the coast to gather these acorns, which they boiled, parched, and ate in the place of bread.

The *bark* on the trunks is almost black, furrowed, and divided on the surface into small, hard, rough, scales. The *wood* is heavy, hard, strong, and tough. It was formerly largely used for knees in building wooden ships, and is still occasionally used for this purpose, as during the World War.

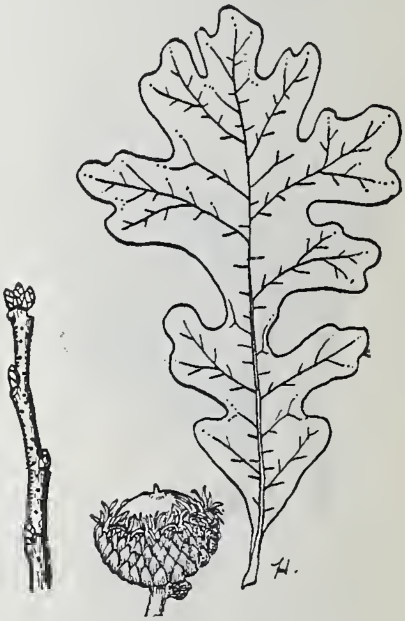
MOSSY-CUP OAK (Burr Oak)

(*Quercus macrocarpa* Michx.)

(Beech family.)

This large and beautiful tree is not common in Louisiana, but has been positively identified in several localities in the central part of the state. It is sometimes as much as 150 feet in height, with a trunk occasionlly 6 feet in diameter. The fine trunk is often clear of branches for 50 feet above the ground, which adds to its value as a timber tree. Its natural habitat is in low, rich bottom-lands, but it will grow satisfactorily when planted in other locations. It is a very valuable tree for forest planting.

This species may be identified by its *leaves,* which differ from those of any other oak. They are large, 6 to 12 inches long, at the stem-end lobed like those of white oak, the end toward the tip usually undivided, as those of cow oak. They are lustrous green above, whitish-green beneath. Occasional leaves have seven lobes.



The *flowers* are borne in slender catkins, pale yellow, tinged with red. The *fruit* is a very characteristic acorn, which gives the tree its name. It varies greatly as to size, but in the South is usually quite large, sometimes nearly 2 inches long. The light-brown cup covers about half the nut, and forms at the rim a "mossy" border which is quite distinctive.

The brown *bark* is deeply furrowed, and broken on the surface into irregualr, plate-like flakes, or scales. The *wood* is heavy, strong, tough, close-grained, durable, and a rich brown in color. It is used in cabinet-making, ship and boat-building, for construction of all sorts, in the manufacture of implements, and for cross-ties, basket-making, and fencing.

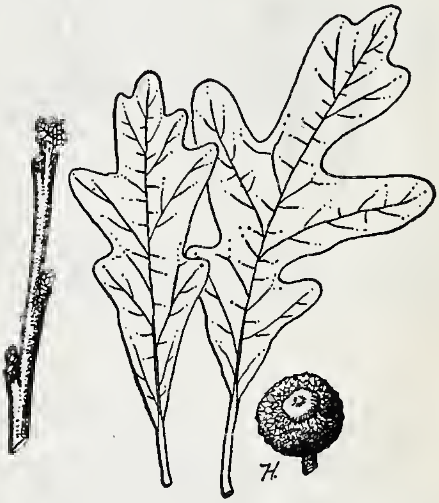
OVERCUP OAK

(*Quercus lyrata* Walt.)

(Beech family.)

This tree does not grow as large as some of the other oaks; it is seldom as much as 100 feet in height, and the trunk rarely over 2 feet in diameter. Usually the branches begin not more than 20 feet from the ground, and form a symmetrical head. It occurs in rich, wet, swamp lands over the state. It attains its largest size in the Red River valley, in Louisiana.

This tree is often called "swamp white oak."



The *leaves* are 7 to 9 inches long, narrow at the base, wider toward the point, dark green above, whitish below, and with 5 to 9 lobes. A characteristic feature is that the lobes are nearly always alternate, only occasionally opposite. The leaves turn yellow, orange, and scarlet in the autumn.

The *flowers,* in slender drooping catkins, appear about the first of April, with the unfolding leaves. The *fruit* is a most unusual acorn, which gives the tree its name. The large, flattened acorn is almost entirely covered by the spherical brown cup, which is thickened at the base, but grows thinner toward the margin.

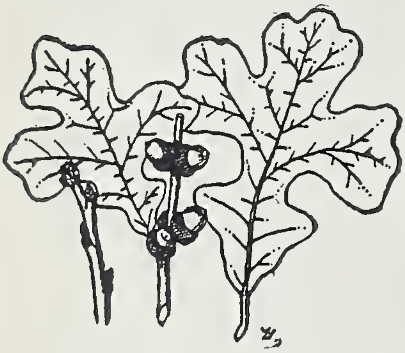
The grey *bark* is rough, breaking into small flakes or scales. The *wood* is heavy, hard, strong, tough, and durable. Commercially it is classed with white oak, and used for the same purposes.

POST OAK

(*Quercus stellata* Wang.)

(Beech family.)

Usually a medium-sized tree, the post oak occasionally grows quite large, with a diameter of around four feet; the latter when it occurs on heavy soil. It commonly grows on sandy or gravelly uplands, not very tall, and assuming a bent form as it grows older. The limbs are often gnarled and crooked, this being one of the characteristic features. The tree occurs in all the hill country of the state.



The *leaves* are usually 4 to 5 inches long, and nearly as broad as long, deeply five-lobed, the lobes broadest at the ends. They are thick and leathery, dark green and shiny on the upper surface, lighter green and rough-hairy beneath.

The *fruit* is an oval acorn, ½ to 1 inch long, and set in a rather small cup, which may or may not be stalked.

The *bark* is grey, rough, and broken into small scales. The *wood* is very heavy, hard, close-grained, and rather durable. It is used for cross-ties, furniture, fence-posts and other purposes. It is largely used for fuel in some localities.

POST OAK

(*Quercus stellata margaretta* Sarg.)

In the sand hills, this species is more common than the above. The latter, mixed with black-jack and sand-jack oaks, often take over denuded pine lands, where heavy fires have killed the young pines. The small trees sprout from roots running just under the surface of the ground, and are then known as "post-oak-runners".

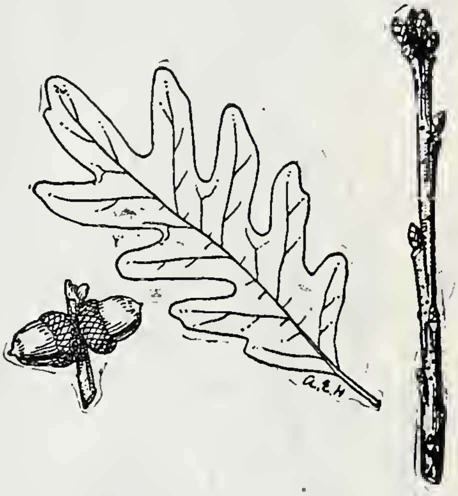
This tree is usually not over 40 feet high, though occasionally much larger. It is easily distinguished from *stellata* by the leaves, which are much narrower, with 3 distinct, rounded lobes, often with two more imperfect ones. The bark is lighter, usually grey.

WHITE OAK

(*Quercus alba* L.)

(Beech family.)

The white oak is one of our most valuable forest trees, and quite attractive in appearance. In the forest, the trunks are tall, straight and clean, excellent for timber. In the open, the tree assumes a spreading form, ideal for shade. This tree occurs over the state, on many types of soil. It is usually found growing with other deciduous trees. In the forest it often reaches a height of 100 feet; in the open, it is not so tall, and has a thick trunk, sometimes 4 feet in diameter.



The beautifully cut *leaves* are from 5 to 9 inches long, and about half as broad. They are deeply divided into 5 to 9 finger-like lobes. The young leaves are soft pink, yellow, and silvery grey while unfolding; later becoming bright green above, paler below.

The *flowers* are borne in drooping catkins, their colors matching those of the young leaves. The *fruit* is a pretty acorn, sometimes over an inch long, pointed, and set in a rough cup. Those acorns are relished by hogs, and every farm woodland should include at least a few white oaks.

The characteristic *bark* is thin, light ashy-gray, almost white on portions of the trunk, and forms long, loose flakes. The bark of white oak varies somewhat on different trees, and sometimes on different parts of the same tree.

The *wood* has many uses and is very valuable. It is hard, heavy, strong, tough, close-grained, and durable. It is used for furniture, shipbuilding, construction, tight cooperage, flooring, interior finish, wagons, implements, crossties, and for basket-making. Where plentiful, it is used for fence-posts and fuel. It is a valuable tree to plant, both for ornament and for commercial purposes.

Another variety of white oak, *Q. alba latiloba* (Sarg.), occurs with the above, and is even more common in the northern part of the state. The leaf is not nearly so deeply lobed, and easily distinguished from that of the former. The latter is less ornamental.

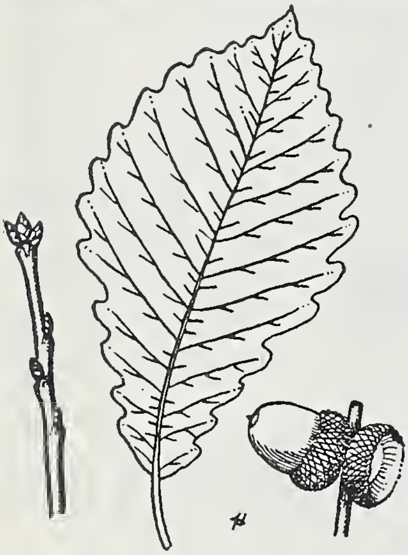
COW OAK. BASKET OAK

(Quercus prinus L.)

(formerly *Quercus michauxii* Nutt.)

(Beech family.)

This oak occurs in bottomlands near streams over the state, but is nowhere very plentiful. In its manner of growth, and the appearance of the bark, it resembles white oak, but is easily distinguished by leaves and acorns. It often attains a height of 100 feet, with a large, straight trunk, free of branches to a good height. It is a beautiful and valuable tree.



The *leaves* are obovate, 4 to 8 inches long, with big rounded notches, rich green above, and downy and whitish beneath. They turn a deep crimson in the fall.

The *flowers* are slender drooping catkins. The *fruit* is a very large acorn, over an inch in diameter, and 1½ inches long. The *bark* is in long, loose grey scales.

The *wood* is heavy, hard, tough, strong, and takes an excellent polish. It is used in all kinds of construction, for agricultural implements, wheels, veneer, boards, fence posts, and in tight cooperage.

CHINQUAPIN OAK

(Quercus muehlenbergii Engelm.)

At first glance, this tree resembles cow oak; but the leaves are much narrower and more sharply and deeply toothed. The pendulous tips of branches are strikingly like those of chinquapin. The acorns are small, very slender and pointed. It is a rare tree, having been positively identified in only Richland, Caddo, Natchitoches, Franklin, and West Feliciana Parishes. It grows on rich slopes and ridges.

It makes a tall and beautiful tree.

The wood is used for about the same purposes as that of Cow Oak.

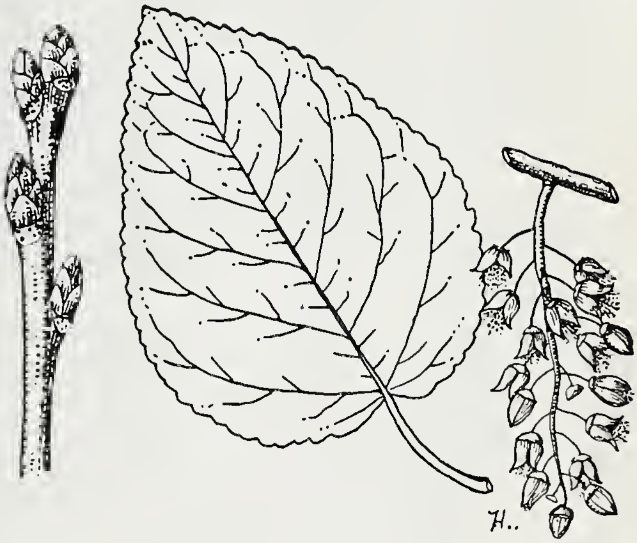
COTTONWOOD

(*Populus heterophylla* L.)

(Willow family.)

In Louisiana, this tree was given its amusing French name, "Langues de femme", because its leaves are never still. Like all of this family, the leaves of the cottonwood are seldom, if ever, perfectly still.

This species grows in rich bottomlands along streams over the state. It attains a height of 70 to 90 feet, with a trunk often 3 feet in diameter. It forms a round-topped head.



The *leaves* are broadly ovate, 3 to 6 inches long, with finely toothed edges, dark green above, and paler below. They are borne on long, slender leaf-stems, and so set on the stems that the slightest breath of air sets them in motion.

The *winter-buds* are enclosed in bright red-brown scales, and become quite showy when they swell in spring.

The *flowers* are yellow catkins, coming in early spring while the tree is still bare. The *fruit* contains the tiny seeds, surrounded by down. The very light seeds are carried far by the wind.

The light-brown bark is shallowly fissured on young trees, on older trunks becoming thick, and divided into long, narrow ridges or plates, sometimes attached only at the middle.

The *wood* is brown, and warps easily, but is now manufactured into lumber. In trade it is sometimes called black poplar, and used for interior finish of buildings.

SOUTHERN COTTONWOOD

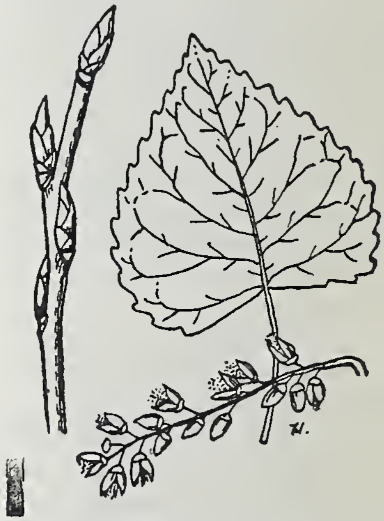
(*Populus deltoides virginiana* Sudw.
P. balsamifera var. virginiana Sarg.)
(Willow family.)

This large cottonwood occurs freely along banks of streams, reaching its greatest size in the rich flood-plains of rivers. It is found growing wherever this type of soil occurs over the state. Where not crowded, the tree forms a great trunk, sometimes 7 feet in diameter, which divides into very large branches. The crown is open, spreading, and graceful. In a grove of young trees, the habit is more upright, with taller, slenderer trunks. The tree grows very rapidly, and is often planted for shade.

The *leaves* are 3 to 5 inches long, almost heart-shaped, deeply-toothed, slightly fragrant, bright lustrous green above, paler beneath. The leaf-stems are long and slender, and often tinged with red.

The *flowers* are borne in drooping catkins, before the leaves appear. The staminate flowers have red anthers. The tiny *seeds* are attached to a fluff of down, and are often carried many miles by the wind. This accounts for the wide distribution of trees of this family. The *winter-buds* are very resinous.

The *bark* on old trunks is grey, and divided into broad, rounded ridges, breaking on the surface into close scales. The *wood* is brown, with nearly white sapwood. It is difficult to season, but is now sawed into lumber. These trees are planted in groves on the Great Plains, and largely supply the inhabitants with lumber for their own use.

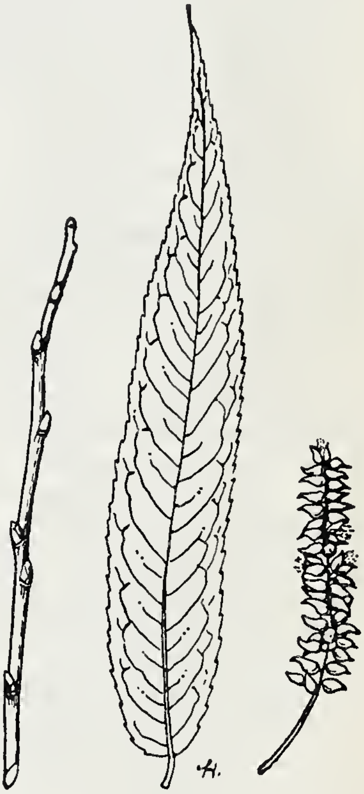


WILLOW

(*Salix nigra* Marsh.)
(Willow family.)

This, the black willow, is the common willow along streams throughout the State. It is usually small, seldom over 40 feet in height, and 8 to 10 inches in diameter, though occasionally it becomes a large tree. Willows grow in masses along streams, where they are useful in holding the soil. They are hardy and grow very rapidly. Small willow poles are sometimes used for fence posts and telephone poles, and these often take root and grow.

This tree is easily identified in winter by the long, slender, bright red brown twigs.



The very narrow, sharp-pointed *leaves* are from 3 to 6 inches long, and finely toothed. They are bright green on both sides, turning a pale yellow in early autumn.

The male *flowers* are fluffy yellow catkins, the female inconspicuous, and borne on separate trees. The flowers come in early spring with the young leaves. The *fruit* is a small pod, holding numerous tiny seeds, which are provided with tufts of long, silky down. These seeds travel miles on the wind, which largely accounts for the wide distribution of the willow.

The brown *bark* is deeply divided into broad, flat, connected ridges, separating freely into thick scales or flakes, on old trunks becoming quite shaggy. In olden times the inner bark was used in making a light purple dye, and also as a substitute for quinine in the treatment of chills and fevers.

The *wood* is soft, light, and not strong, but it does not warp, check or splinter, and is now sawed into lumber to be used in the making of cellar and barn floors, certain kinds of furniture, packing cases, toys and other uses where strength is not essential. It is the chief wood used in the manufacture of artificial limbs. Artists' charcoal sticks are made from willow, because it will not scratch. This high-grade charcoal is also used in the manufacture of gun-powder.

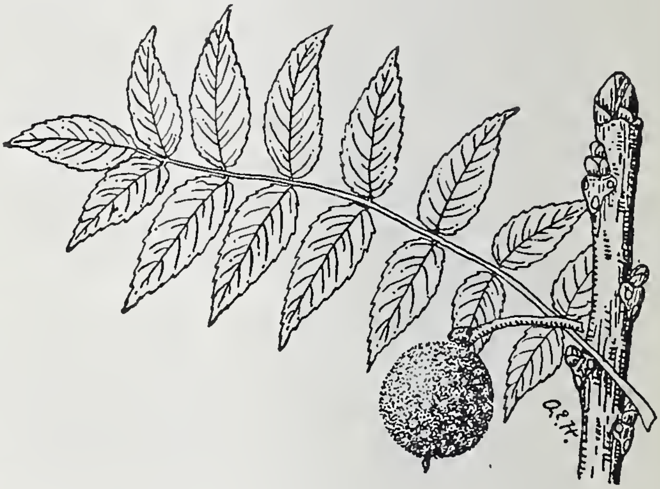
Another species, Sand-bar willow, *(Salix longifolia* Mueh.) occurs along the banks of the Mississippi River, and probably along other rivers.

BLACK WALNUT

(*Juglans nigra* L.)

(Walnut family.)

Black walnut is one of our most valuable trees. It grows rather rapidly, is easily grown from the nuts, and should be planted far more than it is. In the forest, it grows quite tall, with a smooth trunk for half its height; but in the open, it assumes a somewhat rounded form, with a wide, spreading crown. This tree occurs over the state, on rich slopes and bottom-lands. It is plentiful nowhere now.



The *leaves* are alternate and compound, consisting of from 15 to 23 leaflets, of a light-green color. The leaflets are about 3 inches long, tapering, and sharply toothed.

The *fruit* is a large nut, enclosed in a loose hull, which remains green until after the nut falls. The hulls gradually blacken, but have to be pounded off, and the nuts dried before they can be eaten. The kernel is large, nutritious, and fine-flavored. The shell is thick and hard.

The *bark* is dark brown and deeply fissured. The *wood* is largely heart, which is hard, strong, durable, and of a rich brown color. It is entirely free from warping and checking, and takes a high polish, which makes it highly prized for furniture, cabinet work, gun stocks, and airplane propellers.

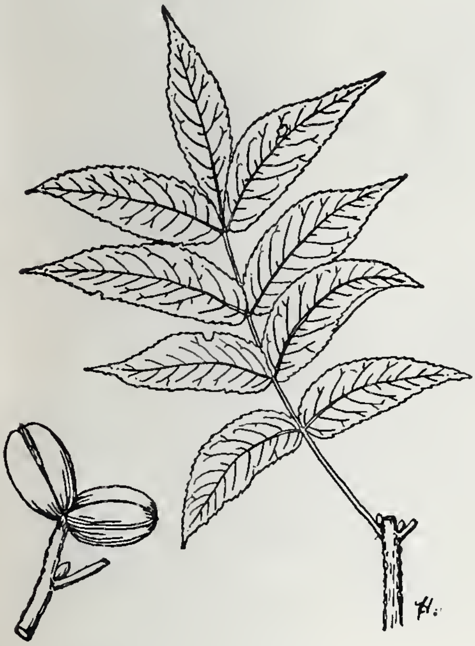
In North Carolina and Tennessee, when walnut trees were very plentiful, the wood was used lavishly, even being made into fence-rails. These fence rails never decayed, and many of them have been collected and sawed up into veneer.

PECAN

(Hicoria Pecan Engl. & Graebn.)
(Walnut family.)

There is scarcely a child in Louisiana who does not know a pecan tree, from having often gathered the nuts. Pecans grow wild in all the rich bottom-lands of the state, and are cultivated in every other part. The nuts of the wild pecans are small, while many of the cultivated trees bear nuts of very large size. The pecans make handsome trees, and are often planted for shade.

Louisiana claims to have the largest pecan tree in the world, growing at Hohen Solms, near White Castle. It measures 7 feet in diameter 3 feet above the ground.



The *leaves* resemble those of other members of the family, hickories and black walnut. They are made up of 9 to 17 leaflets, toothed and pointed. Leaflets are four to seven inches long.

The *flowers* appear in early spring, and hang in tassels about 3 inches long. The husk opens in the fall, and allows the ripened nut to drop. The nuts, which vary in size, in the thickness of the shell, and in flavor, have been greatly improved by cultivation, and are sold on the market in large quantities. The meats are used in the making of candies and cakes; the famous French "pralines" are as well known as Louisiana herself.

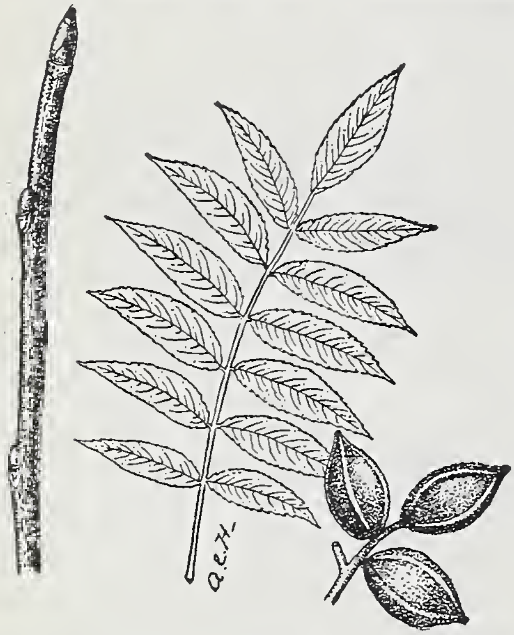
The *wood* is strong, tough, heavy, and hard, and is used for the same purposes as the wood of other hickories.

WATER HICKORY

(*Hicoria aquatica* Brit., formerly *Carya aquatica* Nutt.)

(Walnut family.)

This tree, as its name indicates, grows in bottom-lands and rich, wet woods. It is rather common over the state. It is not a large hickory, seldom attaining a height of 100 feet or a diameter of 2 feet. It is slender, with upright branches forming a narrow head. It is easily distinguished from other hickories by its numerous, small thin leaflets.



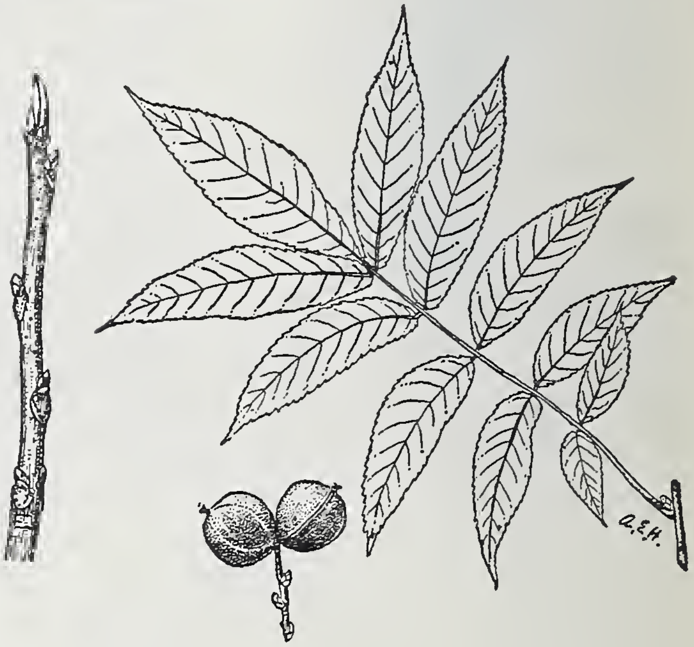
Leaves are compound, 9 to 15 inches long, with 7 to 13 slender leaflets. The *flowers* are like those of other hickories. The *fruit,* often borne in clusters of 3 or 4, is a rather oblong nut, conspicuously four-angled, with a thin hull that splits tardily. The nut itself is nearly as broad as long, four-angled and ridged, with a thin shell, and very bitter kernel.

The light brown *bark* separates freely into long, loose thick, plate-like scales. The *wood* is heavy, strong, close grained, brown, and rather brittle. Probably used only for fuel.

PIGNUT (Bitternut Hickory)

(*Hicoria cordiformis* Britt.)

This tree might be confused with the above, but the *leaves* are shorter with fewer leaflets, and the *fruit* in the hull is rounder and less pointed. The *wood* is much superior to the above, and is used for about the same purposes as that of other hickories. This is a larger tree than water hickory, often attaining a height of 100 feet, with a broad, handsome crown.

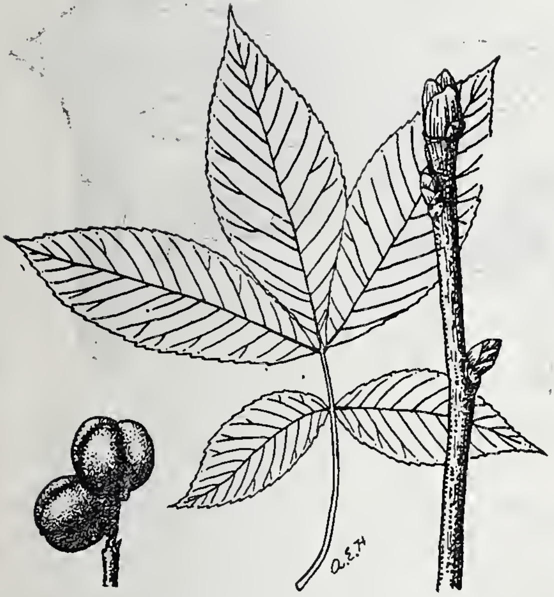


SCALY-BARK HICKORY. SHAG-BARK HICKORY

(*Hicoria ovata* Britton.)

(Walnut family.)

This is not a common tree in Louisiana, but probably occurs in some part of nearly every parish in the state. It grows on rich bottom-lands and moist hillsides. Wherever it occurs it is well-known to children because of its delicious nuts. It is also a valuable timber tree, with its tall, straight, clean, trunk, and wood of excellent quality. The tree attains a height of from 70 to 100 feet, and a diameter of from 1 to 3 feet, sometimes larger. It forms a narrow, round-topped head.



The *leaves* are alternate, compound, 7 to 15 inches long, with five to seven ovate leaflets. The leaflets are 5 to 7 inches long. The terminal winter-bud is very large.

The *flowers,* in drooping catkins, come when the leaves are nearly grown. The *fruit,* a small, globular nut, is borne singly or in pairs. The husk is thick and deeply grooved at the seams; the nut with four prominent ridges or angles. The shell is thin, and the kernel full, sweet, and richly flavored.

The *bark* is very characteristic, giving the tree its name. It is light-grey, separating into large plates or scales which are only slightly attached to the trunk, giving older trees a shaggy appearance.

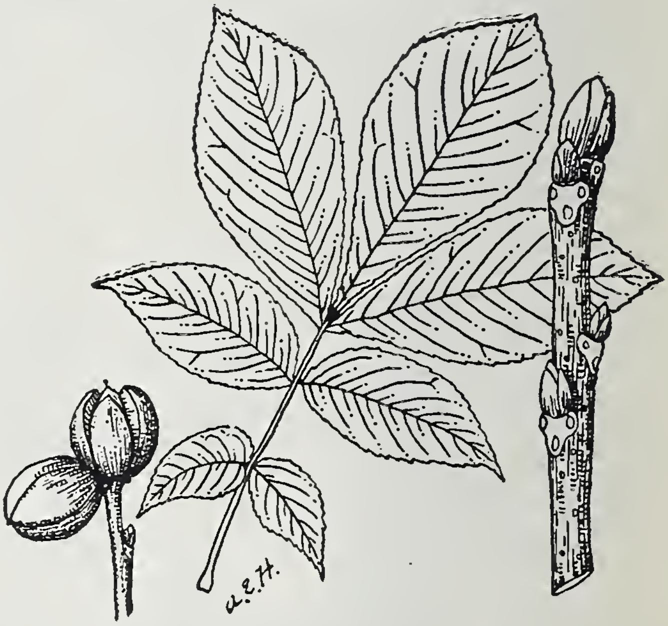
The *wood* is hard, tough, flexible, very strong, close-grained, and is largely used in the manufacture of agricultural implements, tool handles, wagons, and for fuel.

WHITE HICKORY

(Hicoria alba Britt.)

(Walnut family.)

This handsome hickory is found on rich hillsides over the state. It is easily distinguished from others by its bark, very large leaves, and vigorous manner of growth. The limbs are large, spreading, and nearly always upright. On old trees, the lower branches are noticeably smaller than the higher ones, and sometimes drooping. In the open, it becomes a spreading tree, with long branches, the lower ones pendulous. It is seldom as much as 100 feet high, and the trunk not often over 2 feet in diameter.



The *leaves* are compound, with 9 oval (sometimes obovate) strong-scented leaflets. Sometimes 7 and even 5 leaflets occur. The leaves are bright green above, the under surface and the stems very rough. The leaves turn a golden yellow in the fall, adding much to the beauty of autumn woods.

The short, green, pistillate *flowers* are borne at the end of the twig; the staminate catkins several inches from the end. The *fruit* is large, slightly oblong, with a very thick husk. The nut is smooth, usually four-ridged, with a thick shell and partitions, and a small, sweet kernel.

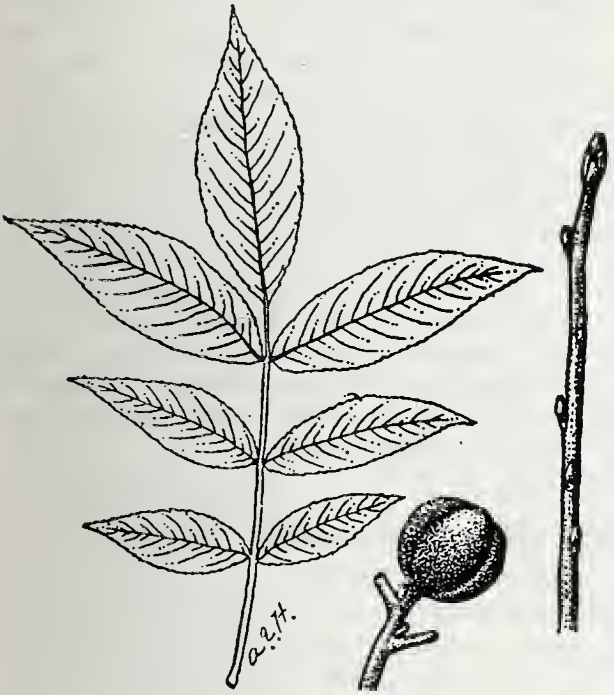
On young trees, the light-grey mottled *bark* is almost smooth; and on old trees, greyish-brown, close, slightly ridged by shallow, irregular fissures, and covered with thin, close, soft scales. The *wood* is heavy, hard, strong, tough, flexible, close-grained, and all white except the very small heart. It is used in the manufacture of wagons, handles, and farm implements, and also for fuel. Hickory is the favorite wood for the curing of meat, being burned green for this purpose.

On account of its nuts, this is an excellent tree for the hog pasture. Because of its beauty, and its valuable wood, it is desirable for almost any location on the farm.

HICKORY (Black Hickory)

(*Hicoria buckleyi arkansana* Ashe.)
formerly *Carya arkansana* Sargent.)
(Walnut family.)

This might well be called "hill hickory", as it is found on dry hillsides and sandy uplands. It is a comparatively small tree, usually not over 60 feet in height, with a trunk rarely over 1½ feet in diameter.



The compound *leaves* are 8 to 12 inches long, with 7 (usually) thin, narrow pointed leaflets, 4 to 6 inches long.

The *flowers* are similar to other hickories. The *fruit* is rounded, usually about 1½ inches long, with a very thin husk; the nut slightly four-angled, with a thin shell and sweet kernel.

The *bark* is nearly black, and deeply divided into irregular, rough ridges. The *wood* is hard, but brittle, and little used except for fuel.

Hicoria glabra megacarpa (Sudworth), *(Carya glabra, var. megacarpa* Sar.), is another hill hickory, differing only slightly from the above. The leaf stems are smooth, whereas those of the above are rather rusty and rough. The leaflets are smooth, and unequal at the base. There are often only 5 leaflets on the stem.

The husk seldom splits free from the nut, but usually falls with it. It is often called Hill Hickory.

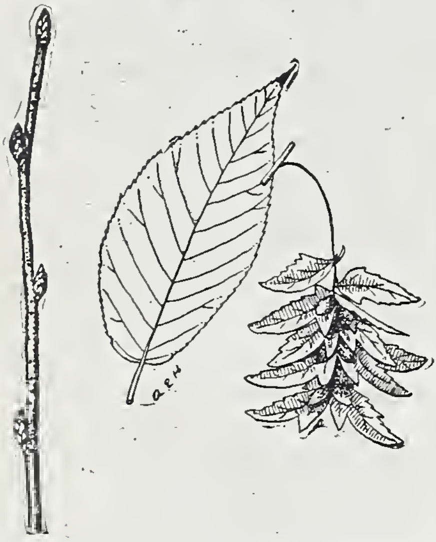
The most distinguishing feature between this and the above, is the *bark,* which is light grey, with narrow ridges. The *wood* is used for about the same purposes as white hickory. The wood of both this and the above is used with that of other hickories in smoking meat. It is burned while green for this purpose.

The nuts of the two hickories on this page are gathered in quantities by children, being sought because of their thin shells and sweet kernels.

HORNBEAM

(Carpinus Caroliniana Walt.)

(Birch family.)



This tree is sometimes called "blue beech", but it belongs to the birch family. It is a small, bushy tree, seldom over 30 feet high. It grows along streams over the state. In winter the tree may be identified by the trunk, which is fluted in up-and-down, irregular ridges. This characteristic gave it the descriptive local name, "muscle-tree."

The oval *leaves* are alternate, long-pointed, and sharply toothed. They are from 2 to 3 inches long.

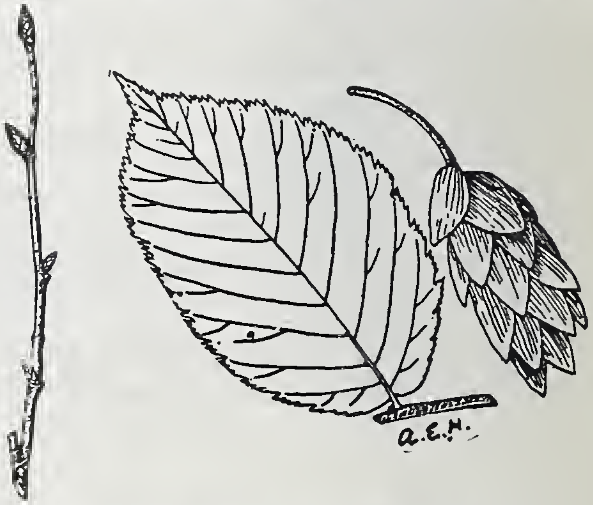
Like all birches, the *flowers* are borne in catkins and appear in late winter. The *fruit* is entirely characteristic, a sure means of identification. Each leaflike scale falls with a nutlet attached.

The bark is bluish-grey, often mottled and banded with darker grey. It is quite smooth. The *wood* is strong, tough close-grained, and very hard. It is used for making handles, levers, wooden cogs, wedges, mallets, etc.

IRONWOOD (Hop Hornbeam)

(Ostrya virginiana K. Koch)

(Birch family.)



This tree resembles the birches, to which it also belongs, more closely than hornbeam. Though the trees are similar in size and shape, it is easy to distinguish between them by the bark and the fruit. Ironwood grows on rich hillsides over the state.

The *leaves* are a little larger than those of hornbeam, and doubly toothed. The *fruit* resembles that of hop, which fact gives the tree one of its common names, "hop hornbeam."

The *bark* is light brown, and divided into narrow, thin, loose flakes, or strips. The *wood* is similar to that of hornbeam, and is used for about the same purposes. Because of their small size, these two trees are not particularly valuable commercially.

RIVER BIRCH

(Betula nigra L.)

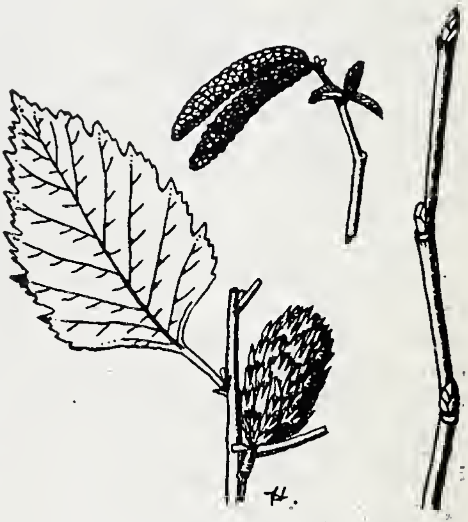
(Birch family.)

This, our only native birch, possesses the grace which characterizes all of this family. These trees group themselves along the banks of streams in a most charming way, always leaning over the water. Their natural habitat is in the deep, overflow lands near rivers and bayous; yet, oddly enough, when planted elsewhere they grow very well, and make attractive street trees.

The pretty *leaves* are alternate, 2 to 3 inches long, oval, with doubly-toothed edges. The upper surface is dark green, the lower much lighter.

Like all of this family, the *flowers* of River birch come in the winter, in drooping catkins, the female flowers much the shorter. The *fruit* is a little cone, about 1 inch long and crowded with tiny winged seeds which ripen in May and June.

At any season river birch may be easily identified by its *bark*, which hangs in loose, papery flakes, giving the trunk an odd, ragged appearance. When these tags are pulled off, the bark underneath is satiny smooth, and beautifully tinted cream, tan, and pale rose. One can write on the papery sheets of bark.



The *wood* is light, hard, strong, close-grained, and is used chiefly in turnery and the manufacture of wooden-ware, sometimes for wagon hubs. Because of its rather scattered distribution, it is not very important commercially.

WHITE ELM

(*Ulmus americana* L.)

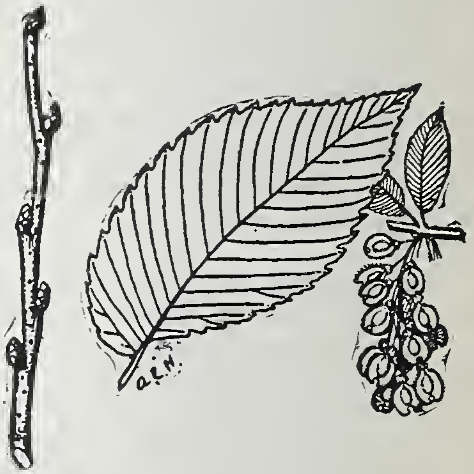
(Elm family.)

This fine elm occurs over the state, but it is not so common nor so frequently planted for shade here as in the North. Neither does it grow so large, seldom attaining a height of over 70 feet, with diameter of 2 or 3 feet; while in the North, it is often 100 feet high, with a diameter of 6 or 8 feet. Whether the tree is bare or in leaf, the shape is entirely characteristic of this family, a gracefully spreading fan. It is a charming tree, long-lived, and quite deserving of its fame.

The *leaves* are alternate, 3 to 6 inches long, uneven at the stem, smooth, dark green above, paler and downy below. Their parallel veining is conspicuous; and they are doubly-toothed.

The tiny, greenish *flowers* are borne in little clusters, and come while the tree is still bare. Even the *fruit* matures before the leaves come. This is a tiny seed, entirely surrounded by a thin wing, with a deep notch in the end.

The *bark* is thick, grey, and divided by deep fissures into broad, flat ridges, on very old trees breaking on the surface into thin scales. The *wood* is heavy, hard, strong, tough, and difficult to split. It is light brown, with thick, somewhat lighter-colored sapwood. It is used in making hubs of wheels, saddle-trees, barrel-hoops, veneer for baskets and crates, and in boat and ship-building.



WINGED ELM (Cork Elm)

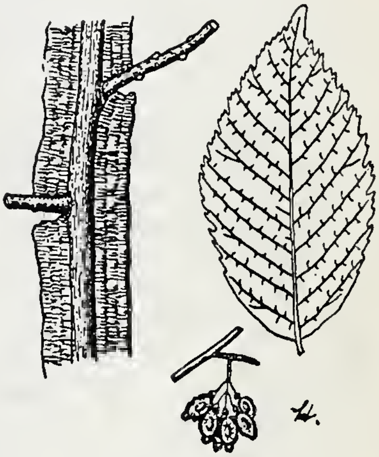
(Ulmus alata Michx.) (Elm family.)

This dainty elm is common on hillsides, in pastures, and along roads over the state. It occasionally becomes a large tree, 100 feet in height, but is not often more than 50 feet high, with a trunk 2 feet in diameter. It is of graceful, drooping habit, but not as decidedly fan-shaped as the white elm. It is easily identified at any time by the fact that most of the twigs bear two corky "wings", often ½ inch wide. It is often planted as a shade tree, and is very satisfactory for this purpose.

The *leaves* are oval, doubly-toothed, usually about 2 inches long, unequally divided, but not as strikingly so as some others of the family.

The tiny *flowers* appear in January; and even the *fruit* matures before the leaves come. When in full fruit, the tree has a charming, smoky appearance. The seed is surrounded by a narrow wing, with a tiny loop at the end.

The light-brown *bark* is divided by shallow fissures into flat ridges, covered by small, close scales. The wood is hard and close-grained, but not strong, and is hard to split. Sometimes used in the making of handles and hubs of wheels.



A similar elm is cedar elm, *Ulmus crassifolia,* the leaves shorter and less pointed than the above, the corky wings less numerous and narrower. Occurs in north Louisiana.

WATER ELM *(Planera aquatica* Gmel.)

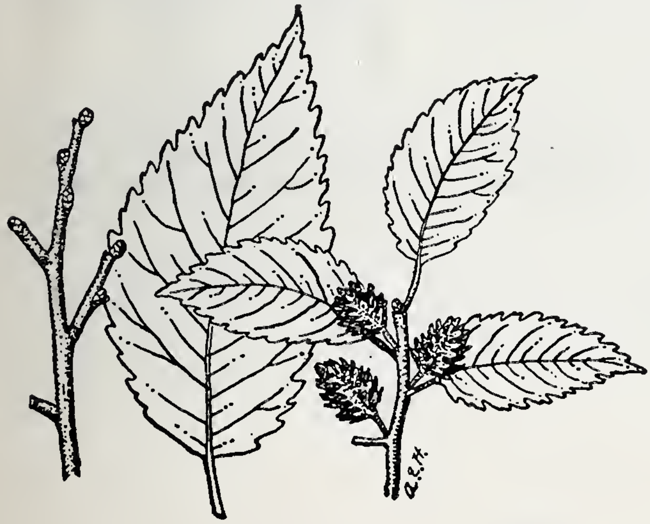
This is a small tree, seldom over 40 feet high, with a trunk usually about 1 foot in diameter. It grows along low banks of streams, where water stands a part of the year.

It occurs over the State.

The *leaves* are oval,, about 2½ inches long, unequally divided, dull green above, paler below.

The tiny *flowers* appear with the leaves. The *fruit,* in tight little clusters, ripens in April.

The *bark* is greyish-brown, and large scales fall, disclosing the red-brown inner bark. The wood has no known commercial value.



SLIPPERY ELM

(Ulmus fulva Michx.)

(Elm family.)

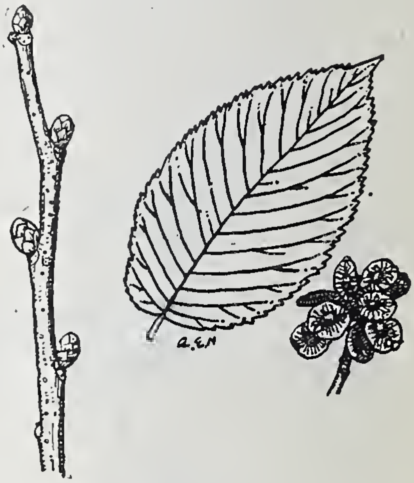
A spreading tree of medium size, this elm is seldom more than 50 feet in height, and 1 foot in diameter. It grows on rich hillsides and the banks of streams over the state, but is nowhere common. It is a rather pretty tree, but is best known for its medicinal qualities.

The Louisiana-French name for this elm is "Orme Gras."

The *leaves* are very characteristic, being large, and much wider on one side of the midrib than on the other. They are doubly-toothed, dark green, and downy on both sides.

The tiny *flowers* are borne in small clusters, and come in late winter. The *fruit,* which ripens when the leaves are about half grown, is a small seed entirely surrounded by a broad thin wing.

The greyish-brown *bark* is frequently 1 inch thick, divided by shallow fissures, and covered with thick, loose scales. The thick, fragrant inner bark is very mucilaginous, and is used in treating dysentery, and for making soothing poultices. This is one of the best-known of home remedies.



The *wood* is heavy, hard, strong, close-grained, durable, and easy to split. It is dark reddish-brown, with thin, lighter-colored sapwood. It is used for crossties, fence posts, hubs of wheels, agricultural implements, and ribs for small boats.

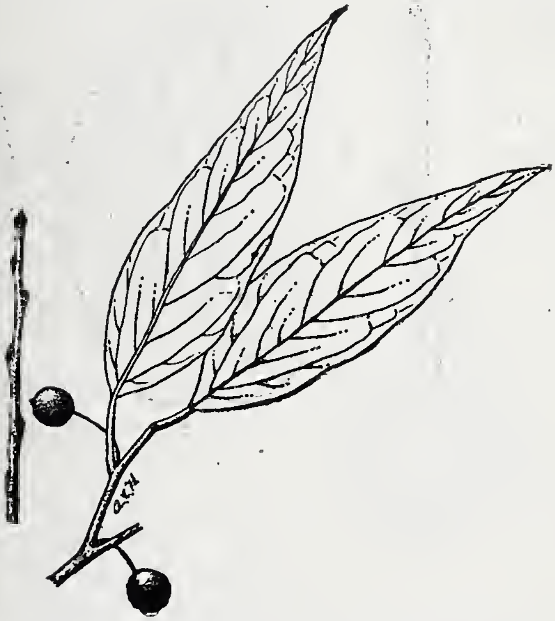
HACKBERRY (Sugarberry)

(*Celtis laevigata* Wild.)

(Elm family.)

In the southern part of the State hackberry is called "Bois inconnu", probably because it was a new tree to the early French settlers. It is often abbreviated to just "Connu", though this reverses the meaning.

This tree is found in nearly every part of Louisiana; on poorer soils a rather small tree, on rich bottom-lands becoming quite large, often 80 feet in height and 3 or 4 feet in diameter. It makes a spreading tree with long, pendulous branches. In the open it is symmetrical and attractive, and is often planted as a shade tree. It grows rather rapidly.



The *leaves* are simple, alternate, oblong-lanceolate, long-pointed, and, as are the leaves of all the elm family, unevenly divided by the midrib.

The tiny white *flowers* are in inconspicuous clusters, and come in early spring. The *fruit* is a small, dull-red berry, with sweet flesh. The berries cling most of the winter, and are eaten by birds.

The *bark* is light grey, with numerous warty excrescences. On the branches the bark is smooth. The *wood* is soft, close-grained, not strong, and light yellow. Commercially it is classed with the wood of *Celtis occidentalis* and sawed into lumber. It is used to some extent in the manufacture of low-grade furniture.

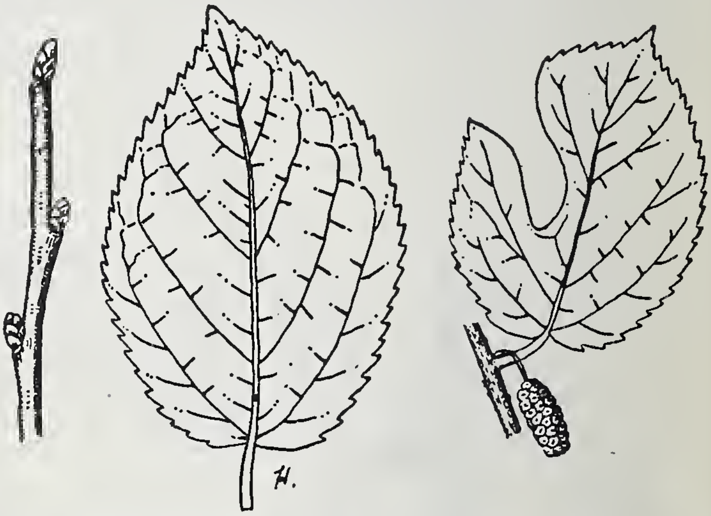
MULBERRY

(*Morus rubra* L.)

(Mulberry family.)

The mulberry is common over the state. It is a shapely tree, sometimes 70 feet in height. The trunk is usually rather short, and seldom more than 3 feet in diameter. The smooth branches form a graceful, spreading crown. This is the only native species of mulberry; paper mulberry, white mulberry, and others, having been introduced.

The *leaves* are alternate, three to five inches long, somewhat heart-shaped, thin, pointed-toothed, and rather hairy. On young trees and shoots, two other distinct types of leaves occur; mitten-shaped, and three-lobed. This is a little confusing to one not familiar with the tree.



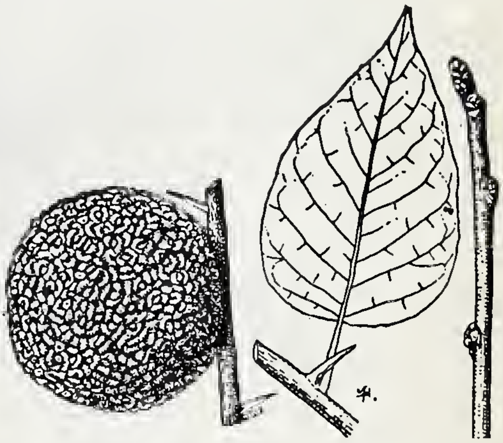
The *flowers* appear after the young leaves are out, in drooping catkins, the female flowers shorter and heavier looking. The *fruit* is black when fully ripe. It somewhat resembles a blackberry, but is longer and narrower, with the stem extending through it centrally. It is sweet and edible, and is greatly relished by birds and various animals. Mulberry orchards are sometimes planted for chickens and hogs.

The *bark* on young trees is smooth and mottled, on older trees becoming greyish-brown, and divided into irregular, elongated plates or scales. The *wood* is yellow with lighter colored sapwood, soft, coarse-grained, and very durable. It is used for fencing, cooperage, and in boat-building. The mulberry is one of the most valuable trees for fence posts, not only for its wonderful lasting qualities, but because it grows very rapidly. Every farmer should keep a few of these trees growing for this purpose.

BOIS D'ARC (Osage Orange)

(*Toxylon pomiferum* Rafn.)
(*Maclura pomifera* Schn.)
(Mulberry family.)

On river plantations, one often sees fences with living Bois D'Arc posts. Sometimes they are allowed to grow, forming a high, almost impenetrable hedge. When the hedge assumes too large proportions, it is cut back. This tree seldom grows very large, but is of low, spreading habit. It sometimes attains a height of 60 feet, with a short trunk, 2 to 3 feet in diameter. It grows in deep rich land over the state.



The *leaves* are 3 to 5 inches long, 2 to 3 inches wide, and narrowly heart-shaped. They turn a bright yellow in the fall. The *flowers* form a small soft ball. The *fruit* slightly resembles a very large green orange. A tree full of the fruit is rather ornamental.

The *bark* is deeply and irregularly divided into broad, rounded ridges, separating on the surface into thin hard scales. It is sometimes used in tanning leather.

The *wood* is flexible, coarse-grained, and exceedingly hard, strong, and durable. It is bright yellow, turning brown on exposure. It is much sought for fence posts and crossties, and is also used for wheel-stock. The Osage and other Indians west of the Mississippi used this wood for bows and war-clubs. It is sometimes called "Bow-wood."

The bark of the roots contains moric and morintannic acid, and is used in making yellow dye.

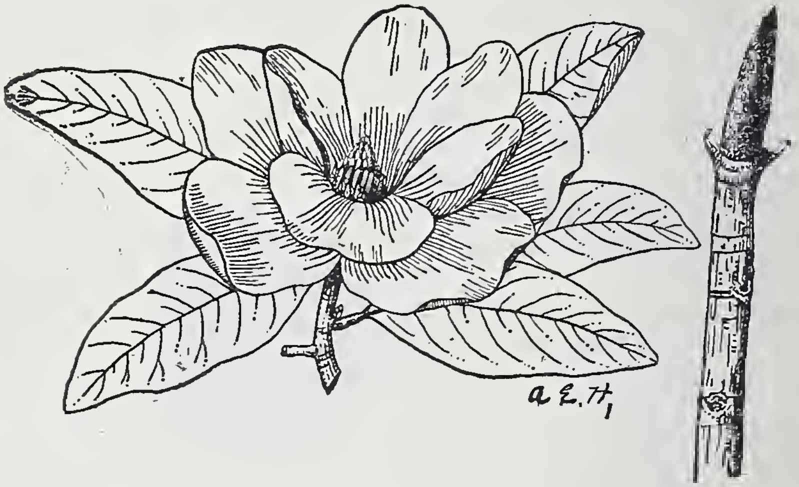
MAGNOLIA

(*Magnolia grandiflora* L.)

(Magnolia family.)

This beautiful tree is so well known as to scarcely need any description. It occurs naturally on bluffs along the Mississippi River, and along streams in the western part of the state, as far north as the central portion of Bienville Parish, reaching practically the same latitude as longleaf pine. In addition to this, it is planted in parks and lawns and gardens in all parts of the South. While its natural choice is a low rich soil, it will grow almost anywhere. Often magnificent specimens are seen growing in the small yards of humble homes.

The great, creamy blossoms and glistening evergreen foliage of magnolia make it a conspicuous tree wherever seen. It has always seemed to belong peculiarly to Louisiana, so the blossom was adopted as the state flower. The tree attains its largest size in this state, some specimens measuring 6 feet in diameter.



The oblong-ovate leaves are shining green above, rusty beneath. They shed at the end of the second year.

The creamy-white blossoms, 8 or 10 inches across, begin opening in April, and a few are seen until the last of July. The *fruit* is rusty-brown with bright-red, fleshy seeds. These fragrant seeds are sometimes used for flavoring salads. The method is to rub one or two seeds in the bowl which is to contain the salad.

The *bark* is greyish-brown, sometimes mottled, and, on old trees, covered with thin, loose scales.

The *wood* is hard, heavy, creamy-white, soon turning brown on exposure; used in basket and crate making, and in the manufacture of kitchen furniture.

SWEET BAY

(Magnolia virginiana australis Sarg.)
(formerly *magnolia glauca* L.)
(Magnolia family.)

This attractive magnolia is common in branch-heads, and other swampy places over the state. It is a tall, slender tree, sometimes as much as 80 feet in height, but seldom over 1 foot in diameter. It begins to bloom when only a few feet tall, and does fairly well in cultivation.

The *leaves* are oblong, 4 to 6 inches long, bright green above and nearly white beneath. The most inexperienced can soon learn to distinguish this magnolia by the leaves, which are quite conspicuous when the wind is blowing. Most of the leaves cling until spring. The pointed, creamy buds of the *flowers* are particularly lovely. The opened blossoms are only 4 or 5 inches across. At the height of their season, in May, the air is filled with their fragrance. The *fruit* is a pod, or cone, containing bright-red seeds.

The *bark* somewhat resembles that of beech, is almost as smooth, and mottled in shades of grey. It is nearly always covered with lichens. The wood is soft, and is used in the manufacture of broom handles and other articles of woodenware.

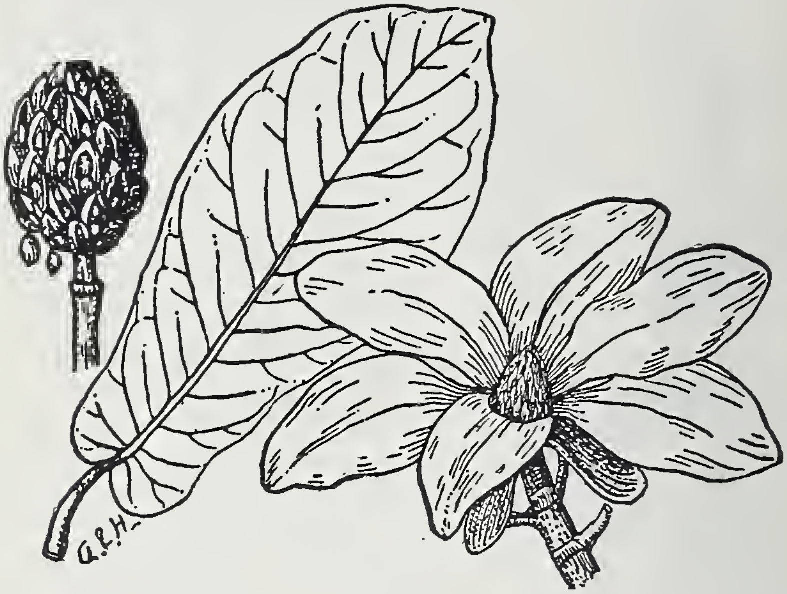
LARGE-LEAVED CUCUMBER TREE

(*Magnolia macrophylla* Michx.)

(Magnolia family.)

This striking and beautiful magnolia is little known, though it occurs in south-east Louisiana, and is abundant in Winn and Grant Parishes. With its enormous leaves, it is quite tropical looking. It grows in a moist, rather sour soil, in the vicinity of streams. It is easily recognized in winter by the extremely large terminal buds, which are almost white, and borne on stout, upright stems. This tree is difficult to transplant.

This magnolia is sometimes known locally as "cow-cumber tree". It is a small tree, seldom over 40 feet high.



The *leaves* are from 20 to 30 inches long, smooth and bright green on the upper surface, lighter underneath. They are not evergreen, falling in the autumn, to curl up and lie on the ground unchanged for a long time.

The creamy-white *flowers* are from 12 to 15 inches across, and open out much flatter than those of the *grandiflora*. They are fragrant, but not strongly so. The bright-rose *fruit* is a pod, or cone, similar to those of other magnolias.

The *bark* is smooth, and greyish-tan. The *wood* is hard, close-grained, light and brittle, and has no known commercial value.

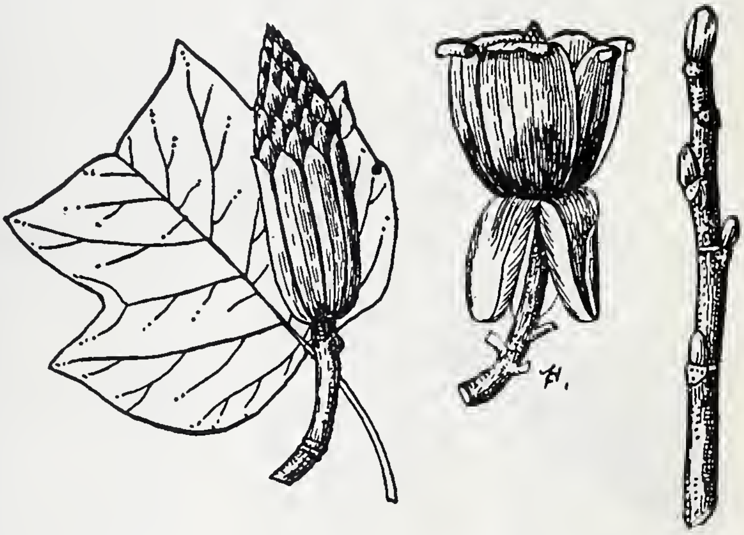
Two other species of magnolia occur in West Feliciana Parish, only. These are: Cucumber Tree, *(Magnolia acuminata ludoviciana* L.) with greenish-yellow flowers, and leaves 6 to 10 inches long; and Mountain Magnolia, *(Magnolia fraseri* Walt.) with leaves 10 to 12 inches long; and pale-yellow flowers 8 to 10 inches across. Both are deciduous.

TULIP TREE (Yellow Poplar)

(Liriodendron tulipifera L.)

(Magnolia family.)

So odd are the leaves and flowers of this interesting tree, one not a botanist would never think of placing it in the magnolia family, but there it belongs. It occurs only on rich bottom-lands, or adjacent slopes, but when planted will grow almost anywhere. It should be widely used in ornamental planting. In the forest it grows tall, straight, and very large, making a fine timber tree. There is a specimen near St. Francisville measuring 9 feet in diameter. It reproduces freely and rapidly, which adds to its value commercially.



The *leaves* are such an unusual shape that they cannot be classified. They look as if they have been cut off near the end.

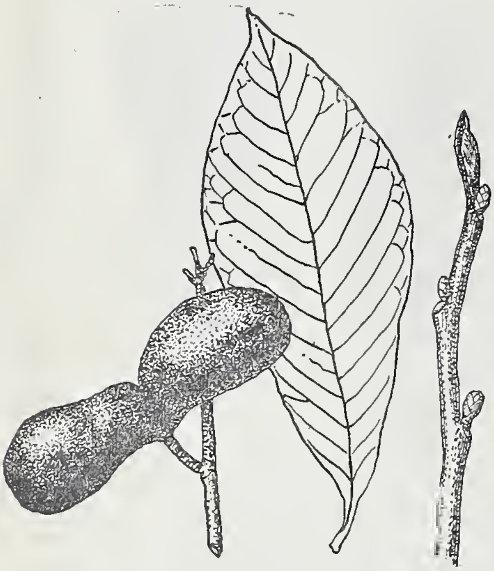
The *flower,* which strikingly resembles a tulip, gives the tree its name. The petals are yellow-green, conspicuously marked with orange across the base. The *fruit* is an upright cone, with many seeds, which are easily carried by the wind. After the seeds fall out, the dainty receptacles cling; and all winter the bare trees are decorated with these pretty "candle-holders."

On young trees the *bark* is thin, mottled, and smooth, becoming brown and furrowed on old trees. A heart stimulant is made from the acrid inner bark. The wood is light, soft, easily worked, and is extensively used for interior trim, vehicle bodies, veneer, woodenware, and other purposes. This is one of our most valuable hardwoods.

PAPAW

(*Asimina triloba* Dunal.)
(Pawpaw family.)

This odd and attractive tree seems to be little known. It is difficult to understand why it is not planted more for ornament. It blooms and bears when only a shrub. Though it grows naturally under the shelter of tall forest trees, it bears much better in open, sunny spots, but requires a rich, moist soil. It occurs over the state in the vicinity of streams, sometimes forming veritable thickets. It is seldom over 30 feet high, with a trunk 8 or 10 inches in diameter.



The *leaves* are obovate-lanceolate, 8 to 12 inches long, light, bright green above, paler below.

The *flowers* are strikingly characteristic. The sepals and petals, arranged in groups of three, alternate. At first, the whole flower is green, but the petals gradually turn brown, finally attaining the rich brownish-red of sweet-shrub flowers. At maturity, the flowers are nearly 2 inches across. The *fruit* is most unusual: it is oblong, 3 to 6 inches long, and containing a number of large, brown seeds. When very ripe they fall to the ground, turning dark brown. This is when they are in condition for eating. The deep yellow flesh is delicious, though some do not care for its very decided flavor.

The *bark* on young trees and branches is a smooth, clean brown; on older trees becoming blotched with grey, and bearing a few small excrescences. The *wood* is light, weak, and spongy, yellow in color, and is of no known value.

In some localities, this plant is called "custard-apple."

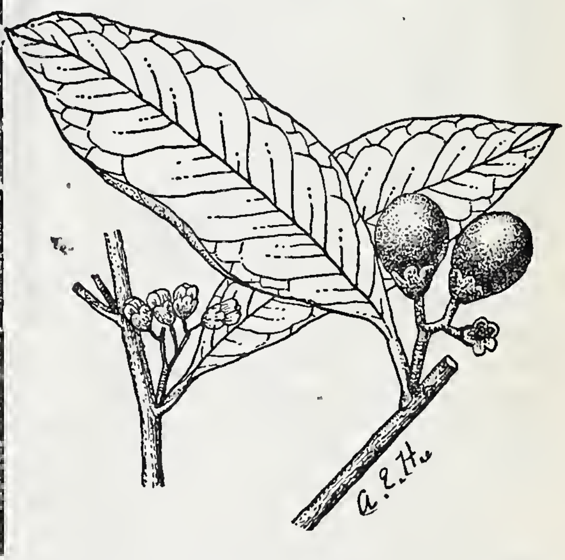
RED BAY

(*Persea Borbonia* Spreng.)

(Laurel family.)

This tree has various local names, such as swamp bay, sweet bay, sweet laurel, and, in South Louisiana, laurier petit magnolia. It belongs to the famous laurel family, one species of which supplied the leaves for the wreaths with which ancient heroes were crowned. Another distinguished member of the family is the avocado, or alligator pear. Camphor tree belongs to the same family; and yet another is our own sassafras.

It is a small tree, but sometimes reaches a height of 60 feet, with a trunk 1½ feet in diameter. There are some fine specimens in rectory yards of Catholic churches in the southern part of the state. It is a shapely, evergreen tree, and deserves more attention for ornamental planting. It grows naturally in rich moist soil near the heads of streams, but is very adaptable, and will grow almost anywhere.



The slender oval *leaves* are 3 to 6 inches long, bright lustrous green above, paler beneath, and very aromatic when crushed. They are evergreen, falling during the second spring and summer. This is the "bay leaf" used in seasoning.

This should not be confused with the true bay, *magnolia virginiana,* the leaves of which are white underneath.

The *flowers* are cream-colored, and very small and inconspicuous. The dark blue *fruit* is about ½ inch long, lustrous, with thin, dry flesh and one large seed.

The reddish-brown *bark* is furrowed on old trunks, and divided into irregular, broad, flat ridges, separating on the surface into small, thick scales. The red *wood* is heavy, hard, strong, close-grained, and rather brittle. Where it attains sufficient size, it is used in cabinet-making and interior finish of houses. Formerly it was used in boat-building.

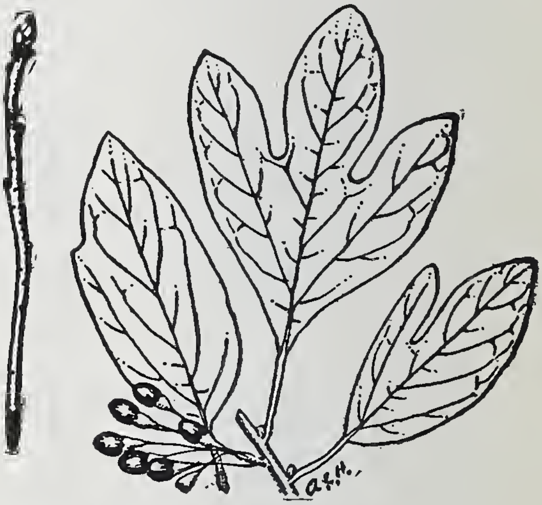
SASSAFRAS

(*Sassafras officinale* N. and E.)

(Laurel family.)

Sassafras is a most distinctive tree, belonging to the laurel family, and closely related to the camphor tree. It is quite ornamental, particularly in the fall of the year. It is found over the state, in sandy soils, often completely taking over abandoned fields. Here the trees are low and shrubby, while in rich soil it becomes a large tree ,often 75 feet high, and 2 feet through.

The roots are much used for making a pleasant-flavored tea, which is drunk for a tonic in the spring.



Sassafras is one of the few trees which have *leaves* of different shapes on the same twig. Leaves of 3 distinct forms are often seen growing on one branch; oval, three-lobed, and a mitten-shaped leaf. The leaves and young twigs are bright green, and quite mucilaginous. The leaves are gathered, dried, and pounded into powder to make "filé," which is used to season and thicken gumbo.

The *flowers* are greenish-yellow, clustered, and open with the first unfolding of the terminal buds, in March. The *fruit* ripens in midsummer. The berries are dark blue, and the stems and thick calyx-lobes bright red, a combination which makes the clusters of berries very attractive. They do not remain long, however, as they are eaten greedily by the birds.

The *bark* on the trunk is light-brown, thick, and deeply furrowed. The wood is light, soft, brittle, weak, but very durable in contact with the soil. It is much sought for fence-posts. It is also used for rails, boat-building, cooperage, and ox-yokes. The bark of the roots yields an aromatic oil, used in flavoring candies ,and in various commercial products.

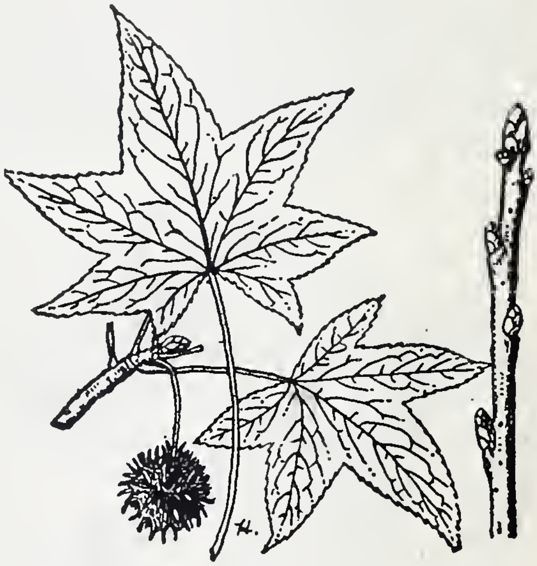
This interesting tree should certainly be planted in parks, where the soil is suitable. It must be well drained.

SWEET GUM (Red Gum)

(*Liquidambar styraciflua* L.)

(Witch-hazel family.)

This tree is common over the state, and is found growing in almost every type of soil. It is usually abundant in second growth in cut-over woods, and on abandoned fields, growing with shortleaf and loblolly pine. Like these trees, it has rather light, winged seeds, easily carried by the wind for some distance. On hill-sides, the tree seldom grows very large, but in rich bottom-lands it often attains a height of 125 feet, with a diameter of 4 or 5 feet.



The simple, alternate *leaves* are star-shaped, and 5 to 7 inches across. In the fall, their coloring is strikingly beautiful, the colors ranging from pale yellow, through orange, and all shades of red, to bronze and purple. Because of its autumn colors, the tree is sometimes planted for ornament.

The *flowers* resemble tiny balls, several on a stem. The *fruit* is a prickly ball, made up of a number of capsules with projecting spines. After the capsules open, releasing the seeds, the long-stemmed balls often swing on the tree till late winter. Many small birds feed on the seeds.

The *bark* is grey, with rough, corky scales, becoming furrowed on old trees. The *wood* is heavy, hard, close-grained, but not durable on exposure to weather or soil. The wood is used for flooring, interior finish, and veneers for baskets. The large red heart, from which it takes its commercial name, red gum, has a beautiful grain, and is much in demand for furniture. It is usually made into veneer, often being sold for Circassian Walnut. It is also used for gun-stocks.

The wood is difficult to season, and should be carefully kiln-dried.

Many private land-owners are just now learning the value of these fine trees, and formerly thousands of them were deadened and allowed to go to waste in the clearing of fields.

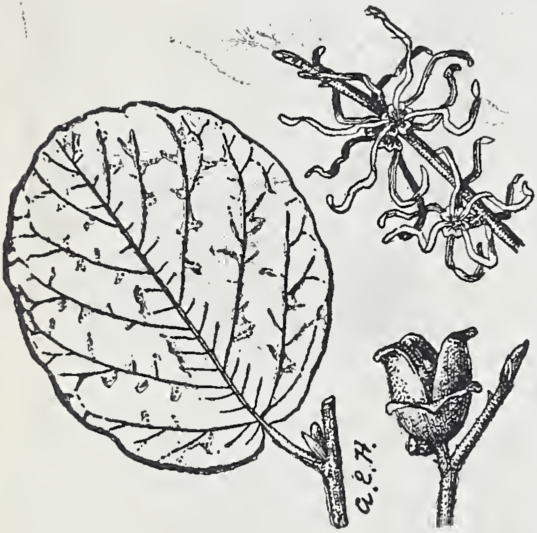
Nearly all southern children know this tree, because of their fondness for chewing the gum which exudes from cuts and hardens into tempting clear drops.

WITCH-HAZEL

(*Hamamelis macrophylla* Pursh.)

(Witch-hazel family.)

This small tree (often a shrub) is interesting on several counts. It blooms at a time when all the other trees are dormant, sweetening the winter woods. From the bark is distilled a product which is used in astringent and healing lotions . It is common in the sand hills of the state, growing oftenest in shrubby clumps. These twiggy branches are often cut for "brush-brooms", for sweeping yards. In thick woods, the witch hazel switches are long, straight, and slender, and are the children's favorite fishing-poles. At any time of the year, it is easily identified; in winter by the flowers, at any other season by the odd little nuts.



The *leaves* are usually rounded, but often with a point, with a wavy margin, unsymmetrical at the base, bright green above, slightly paler below, 3 to 5 inches long. They are a little rough on both sides, with tiny tubercles at the base of the hairs.

The odd, yellow *flowers* are borne in clusters along the stem, with long, very narrow, twisted petals. They come during November, December, and January, the time depending somewhat on the weather. They possess a most refreshing fragrance. The *fruit* is a hard, tough capsule, with four little points. It divides in half, each half containing a shiny black seed. In the late summer or early autumn, these pop open and the seeds fly out. The nutlets are often borne in clusters, and the empty hulls, which cling until well into the winter, are quite characteristic.

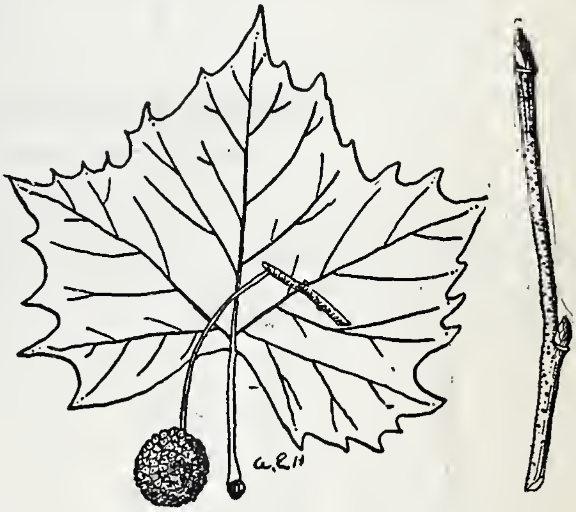
The *bark* is smooth, white, grey and light-brown mottled. The *wood* is hard and close-grained, but the trees do not grow large enough to be of commercial value.

SYCAMORE

(Platanus occidentalis L.)

(Sycamore family.)

The sycamore is a well-known tree which occurs over the entire state. It grows rapidly, attaining its largest size on rich bottom-lands. It is sometimes 150 feet in height, with a trunk 6 to 8 feet in diameter. In the open it divides into massive branches which form a wide-spreading crown. Because of its rapid growth, it is sometimes planted as a street tree, though not as desirable as some other species.



The *leaves* are alternate, 5 to 8 inches long (larger on young shoots), with 5 shallow lobes, light green and smooth above, paler below. The base of the leaf-stem is hollow, and covers the winter bud.

The *flowers* are in soft balls, which become larger and firmer as the fruit matures. These balls hang on the bare tree all winter, breaking up in early spring, when the seeds are carried far by the wind.

The *bark* is the tree's most characteristic feature. On branches and young trunks, it is very smooth, and almost pure white. When the tree is bare, these stark white branches present a ghostly appearance at night. They are beautiful seen against a blue sky. The lower portions of older trunks become covered with a permanent, thick, rough brown bark. The branches shed their bark yearly. The *wood* is the favorite material for tobacco boxes, ox-yokes, and butcher's blocks. It is now also used for furniture and the interior finish of houses. It is hard, but not durable on exposure.

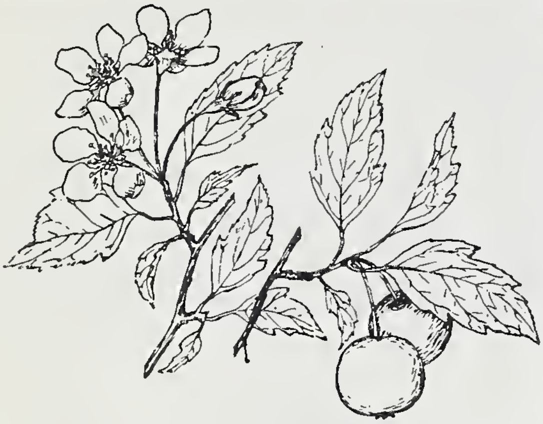
CRAB-APPLE

(*Malus angustifolia* Michx.)

(Rose family.)

This lovely little tree is not common, but occurs here and there over the state, occasionally forming extensive thickets. It is little known, but deserves to be planted for ornament. It is a low tree, rarely 30 feet high, with a short trunk, and wide-spreading branches.

The *leaves* are more like those of the haws than like cultivated apples. Nothing could be more deliciously fragrant than the delicate pink-and-white *flowers*. They are about 1 inch across, and borne in clusters of about 5. The *fruit* is small, greenish-yellow, sour, but very fragrant. It is excellent for jelly making. Another species, *Malus ioensis* occurs in several parts of the state.

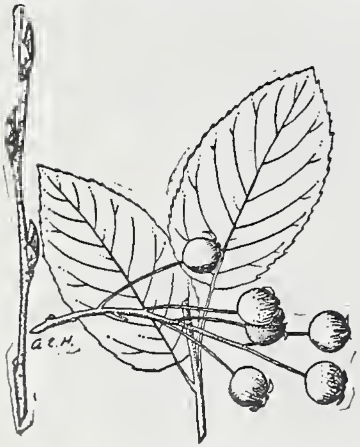


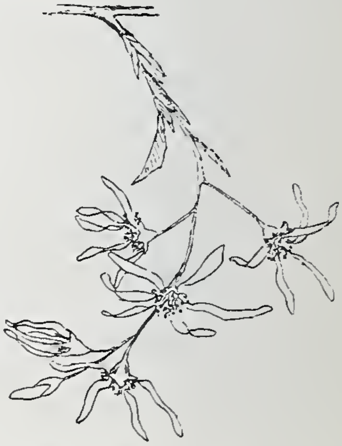
SERVICE-BERRY (Shadbush)

(*Amelanchier canadensis* Med.)

(Rose family.)

This is another attractive small tree, or shrub, which is little known in Louisiana, but which deserves more attention. It is a slender, graceful tree, which in this state is seldom over 25 or 30 feet tall. Nowhere common, it occurs here and there over the state.





Leaf and Berry two-thirds natural size

The *leaves* are beautifully veined, and turn a bright, clear yellow in autumn. The *flowers* come very early, usually by the last of February. They grow in short, drooping racenes, white, with tiny touches of rose.

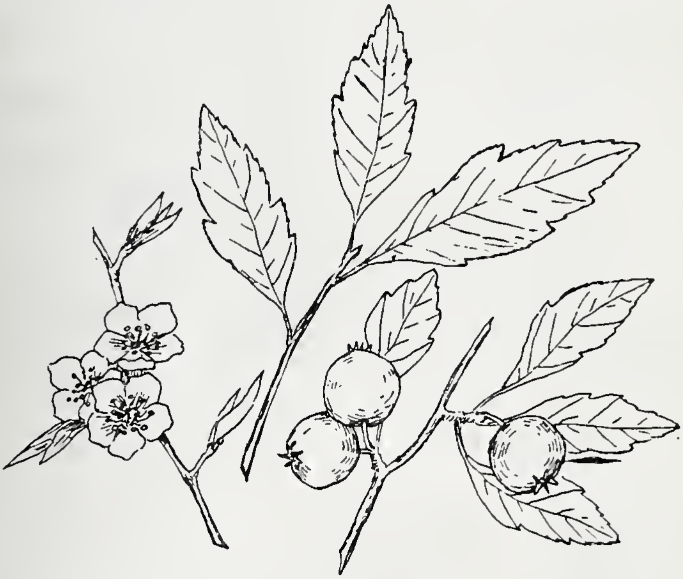
The pretty, dark-red *berries* ripen in June, and are pleasant-flavored. The tree will grow in almost any situation that is well drained, but not too dry.

MAYHAW

(*Crataegus opaca* Hook.)
(Rose family.)

This interesting haw occurs in only four states, and is most abundant in Louisiana. It grows at the edges of swamps and ponds, where water stands a part of the year. These trees often form extensive thickets.

This haw is remarkable for its unusual time of fruiting, and at this time is recognized by every child. After the fruit is gone, it is a little harder to distinguish it from other haws. It is of low, spreading habit, sometimes becoming a tree 30 feet high and 1 foot in diameter. It has few thorns, usually bearing a few, about 1 inch long, on second-year wood.



The *leaves* are about 2 inches long, pointed, narrowing toward the stem, finely toothed from the middle to the tip, sometimes slightly lobed, dull green, and rather downy beneath.

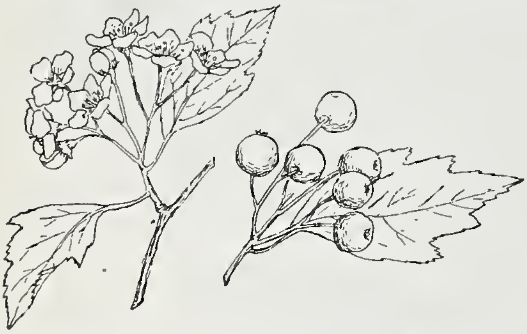
The *flowers* are the largest of the crataegus family, 1 inch in diameter, white, and borne in clusters of only 2 or 3. The *fruit,* an unusually large haw, sometimes nearly an inch in diameter, ripens in April. When fully ripe, these haws are scarlet, lustrous, mellow, pleasantly acid, and very fragrant. The fruit is gathered in large quantities for the making of mayhaw jelly, which is delicious.

On old trees the *bark* is fissured, and divided into dark-brown, persistent scales. The *wood* has no commercial value.

HOG-HAW (Red Haw)

(*Crataegus viridis* L.) (Rose family.)

The *Crataegus* family is a large one, being represented by about 30 species in Louisiana alone. *Crataegus* is the true haw, or hawthorn, and the English "may" belongs to this family. Some of our most ornamental small trees belong to this group. As there are so many species, only a few of the most typical can be listed here. *Crataegus viridis* forms a shapely small tree, seldom over 30 feet in height, and with a straight, often fluted trunk. The tree is easily identified by the bark, which is smooth, mottled light-grey and tan, with an occasional rough flake, and which closely resembles the bark of crepe myrtle. Abundant in heavy, rich, swamp lands.



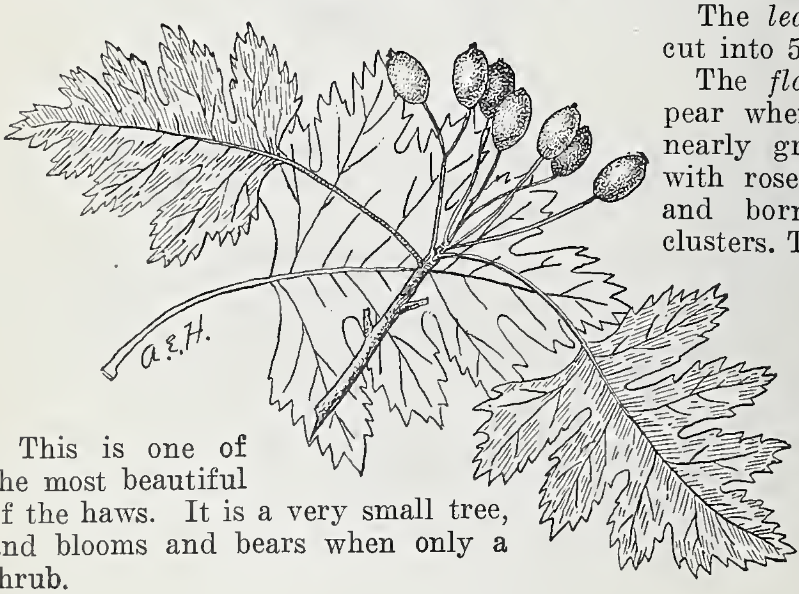
The *leaves* are sharply toothed, slightly three-lobed, 1 to 2 inches long; much larger on young shoots.

The *flowers,* which come when the leaves are almost grown, are white, with yellow anthers, and borne in airy clusters. The scarlet *fruit,* which ripens in autumn, is borne on slender stems, in many-fruited clusters. These little haws cling all winter, adding a bright touch to winter woods at the edege of swamps. They are sometimes found growing with winterberry.

Two other similar species are *Crataegus crocina,* with small, bright yellow haws; and *C. brachyacantha,* known in the southern part of the state as Pomette Bleue; and indeed the bright blue haws do resemble "little blue apples."

PARSLEY HAW (Red Haw)

(*Crataegus apiifolia* Michx.)



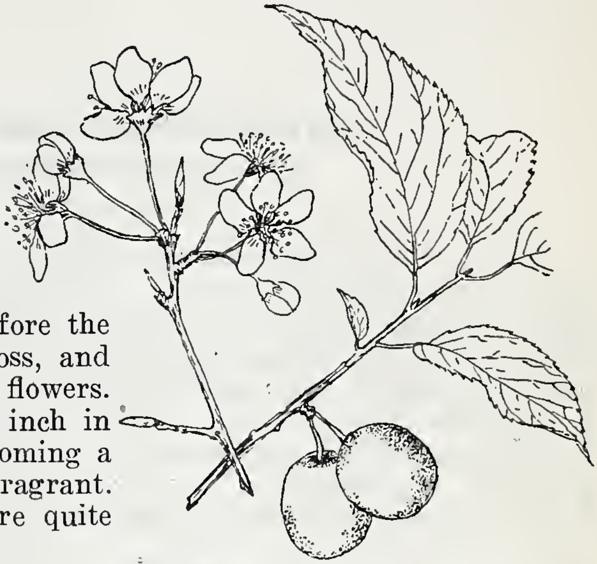
The *leaves* are daintily cut into 5 to 7 lobes.

The *flowers,* which appear when the leaves are nearly grown, are white, with rose-colored anthers, and borne in exquisite clusters. The *fruit* is small, bright, scarlet, and clings all winter. It is pleasant -flavored. It will grow almost anywhere.

This is one of the most beautiful of the haws. It is a very small tree, and blooms and bears when only a shrub.

WILD PLUM (*Prunus mexicana* S. Wats.) (Rose family.)

This charming tree is one of the first to flower, often being foamy-white with bloom by the last of Feburary (in this state). The tree is usually about 25 feet high, with a broad crown, and is of graceful form. This species occurs over the state, but never forms thickets, as do many others of the plum family.



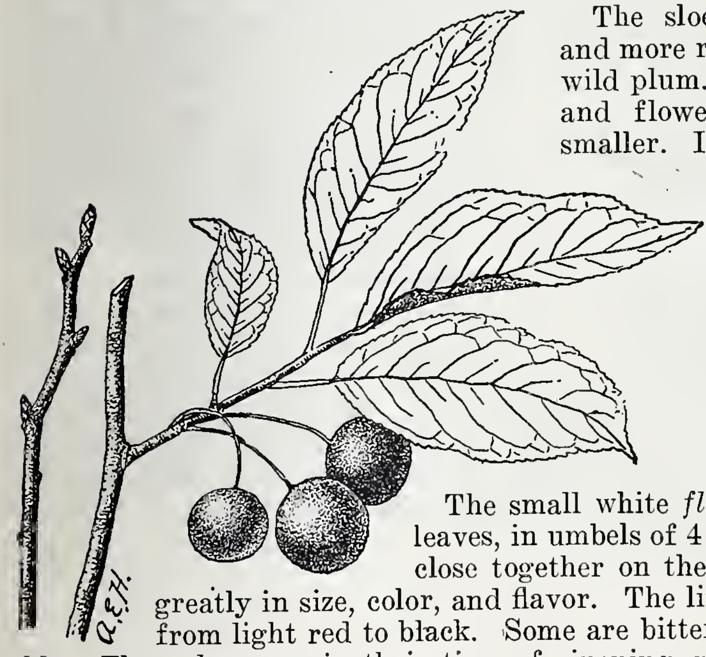
The pointed, ovate *leaves* are from 1½ to 3 inches long.

The white *flowers* appear before the leaves, are nearly an inch across, and borne in small umbels of 3 or 4 flowers. The *plums,* which are about 1 inch in diameter; ripen in autumn, becoming a rich reddish-purple, and very fragrant. When thoroughly ripe, they are quite palatable.

The *bark* is very light brown, and forms in long, narrow, loose flakes.

SLOE (*Prunus umbellata* Ell.)

The sloe tree is usually lower and more rounded in form than the wild plum. It blooms a little later, and flowers and fruit are both smaller. It, too, is quite attractive, and very effective planted in parks or other large grounds. It occurs over the state. There are several other species of sloe which probably occur locally.



The *leaves* of sloe are much smaller than those of wild plum.

The small white *flowers* appear before the leaves, in umbels of 4 or 5 flowers, the clusters close together on the stem. The *fruit* varies greatly in size, color, and flavor. The little plums range in color from light red to black. Some are bitter, while others are palatable. They also vary in their time of ripening, ranging from the first of August to the middle of November.

The *bark* is darker than that of wild plum, almost black, and broken diagonally into small, hard scales.

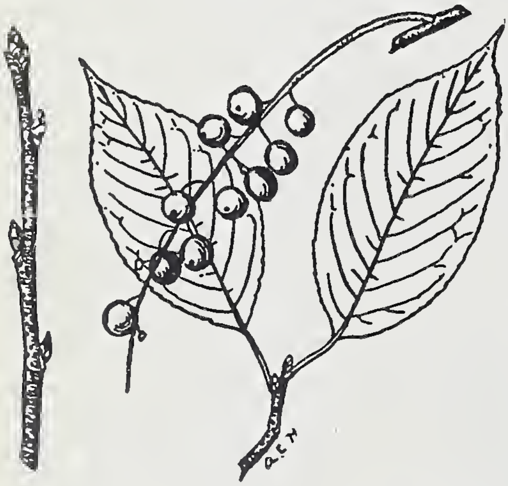
WILD CHERRY (Black Cherry)

(*Prunus serotina* Erh.)

(Rose family.)

In the forest, wild cherry attains a height of 100 feet, with a fine, clean trunk; but in the open, it is of more spreading habit. It sometimes attains a diameter of 4 feet. The branches are slender and graceful. It is one of our most valuable hardwoods, and an attractive tree. Any one wishing to attract birds should certainly plant as many wild cherry trees as space will allow.

The bark yields hydrocyanic acid, used in medicine as a tonic and sedative. The bark in a mixture of whiskey and honey has long been famous among home remedies as a tonic for coughs and colds.



The *leaves* are alternate, simple, oval to oblong-lanceolate, and finely toothed. They are glossy green above, paler beneath.

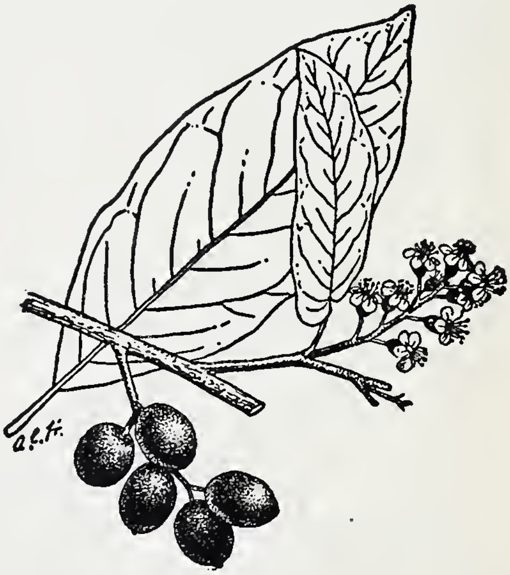
The *flowers,* which come in March, are small, white, and borne in pretty little racemes. The *fruit* is small, first red, then shiny black when fully ripe, and borne in long drooping clusters. It is juicy, strong-flavored, but rather palatable. It used to be famous in the South for the making of "cherry-bounce." This fruit is a great favorite of the birds.

Young trees are easily identified by the very charactertic *bark,* which is beautifully banded in tones of grey, grey-green, and light brown. In older trees, it is slightly fissured, and often marked by pale, irregular excrescences. The *wood* is reddish-brown, hard, close-grained, and takes a beautiful finish. It is much sought for use in interior finish, and the making of furniture, tools, and implement handles. It is to be regretted that the tree is not more common.

LAUREL CHERRY

(*Prunus caroliniana* Ait.)
(Rose family.)

It is difficult to understand why this beautiful evergreen is not more popular for ornamental planting. It is free from disease and quite adaptable. It is usually a small tree, but sometimes becomes rather large, with a height of 60 or 70 feet, and a trunk 18 inches or more in diameter. These fine specimens are generally found in old yards. It is sometimes planted to form a high hedge. It should not be planted where stock ranges, as the partially withered leaves and branches are fatal to animals browsing upon them, owing to the hydrocyanic acid which they contain.



It occurs on rich land over the state, but is not common.

The *leaves* are oblong-lanceolate, with a few tiny, very sharp teeth along the margins, dark lustrous green above, paler below. They cling until the second year.

The small white *flowers* come in clusters, in early spring. The *fruit* is a black berry which ripens in autumn, and clings until the following spring. These berries are eaten by some birds.

The *bark* is rather smooth, grey, and marked by almost black blotches. The *wood* is heavy, hard, strong, close-grained, rich brown in color, with a thick, lighter-colored sapwood.

This tree has many local names, among them are: cherry laurel, wild peach, mock orange, and in South Louisiana, laurier amande.

REDBUD

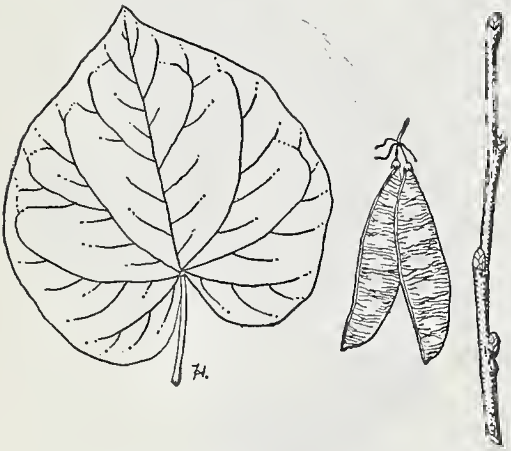
(Cercis canadensis L.)

(Legume family.)

This charming small tree vies with the dogwood in popularity. It blooms so early in the spring, it is always with a shock of surprise that one sees its exquisite color massed along the banks of a stream, around the borders of a still-dead field. It is usually a low, spreading tree, from 15 to 30 feet high, but sometimes makes a sizable tree 50 feet in height. With its graceful branches and pretty leaves, it is attractive the year round. It is occasionally planted for ornament; but there should be individual specimens in every garden, and clumps in every park and along streets and highways. It grows rapidly, is free from disease, and easy to transplant.

In shape, the *leaves* are perfect hearts; they are bright green, 3 to 6 inches long.

The reddish-purple, pea-shaped *flowers* are borne in numerous clusters along the twigs and branches, and appear before the leaves in very early spring. On some trees the flowers are lilac. The *fruit* is a very thin, dry bean, with tiny, shiny seeds. The beans mature in late summer, but cling through most of the winter.

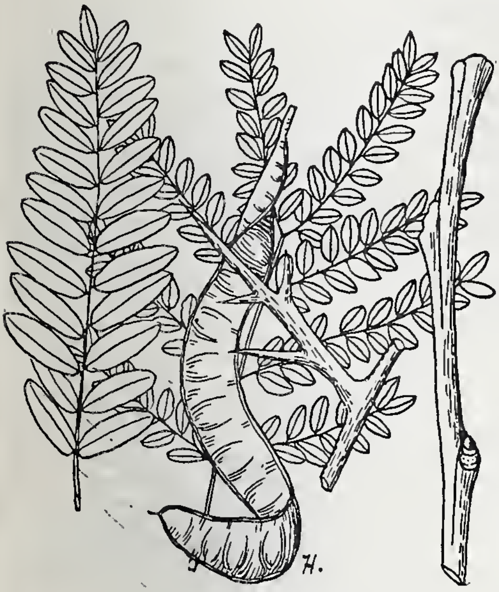


The *bark* on young growth is bright brown, on older trunks, divided by longitudinal fissures into long, narrow plates, the surface separating into thin scales. Branches are sometimes mottled with grey. The wood is hard, coarse-grained, not strong, and reddish-brown in color.

HONEY LOCUST *(Gleditsia triacanthos* L.)

(Legume family.)

The Louisiana-French name for this tree is "Piquant amourette". It occurs in almost every part of the state, but is usually found growing in a rather heavy rich soil. It is a large tree, often 100 feet in height, with a trunk 2 or 3 feet in diameter, sometimes much larger. It is well armed with stout, sharp spines.



The *leaves* are pinnate, with 18 to 28 leaflets; sometimes bi-pinnate, with 4 to 7 pairs of secondary leaflets.

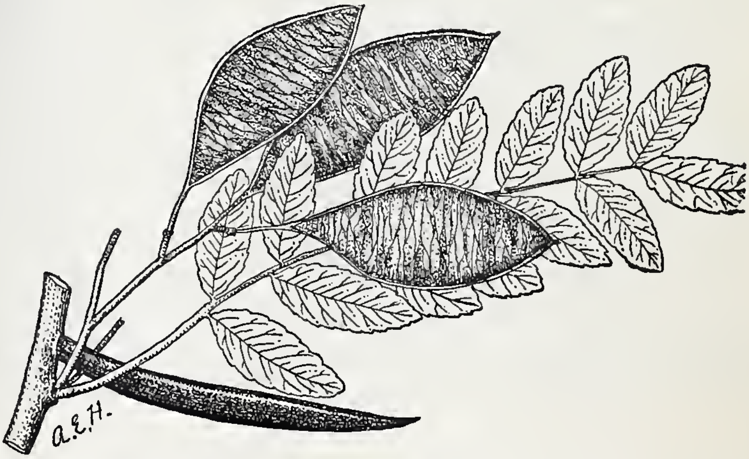
The *flowers* are borne in rather inconspicuous racemes, appearing in late spring. The *fruit* is a long, flat bean, brown when mature, with sweet yellow pulp, and hard seeds. The pods are eaten by many animals, and occasionally by children.

The *bark* on old trees is dark grey, and divided into thin close scales. The *wood* is hard, strong, coarse-grained, and fairly durable in the soil, though not so durable as black locust. It is used for fence-posts and crossties, and occasionally for hubs of wheels and in construction.

WATER LOCUST *(Gleditsia aquatica* Marsh.)

This tree is very much like the above, but is found only in swampy areas, where water stands a part of the year . It is very abundant in these areas. Similar to the honey locust, its heavy, sharp spines are very characteristic.

The *leaves* are quite similar to those of the above, but with fewer leaflets. The *flowers,* in inconspicuous racemes, appear in late spring. The *fruit* is borne in pendant racemes, and is a short, tough, reddish-brown bean, quite different from that of honey locust.



The *bark* is similar to the above. The *wood* is much like that of honey locust, but is seldom used .

BLACK LOCUST

(*Robinia pseudoacacia* L.)

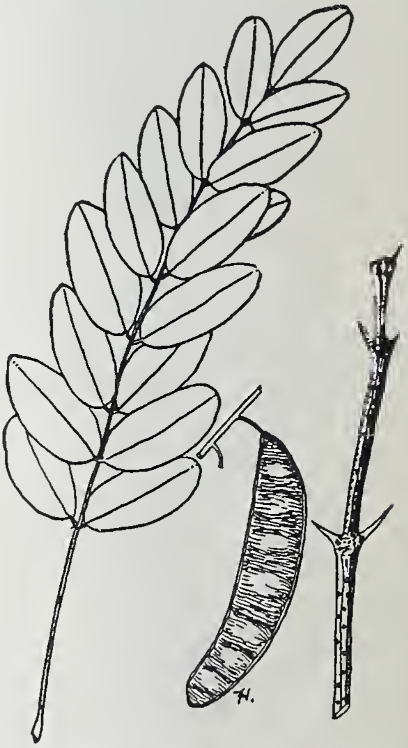
(Legume family.)

This tree was probably brought in from some of the eastern states, but is now so widely naturalized as to seem to be a native tree. It occurs over the state, in old clearings and around the borders of fields. It will grow almost anywhere except in swamps. It grows rapidly ,and is very attractive when in bloom. It has been much planted for ornament, and for fence-posts. It oftens spreads by means of root-runners. These masses of roots are very effective in holding the soil on slopes. This is an excellent tree to use for reclaiming washed and gullied lands. It occasionally attains a height of 80 feet, and a diameter of 3 feet.

The light-green *leaves* are pinnate, 7 to 12 inches long, with 9 to 21 thin, oblong leaflets.

In March, the fragrant white *flowers* cover the tree. They are borne in drooping, graceful racemes. Bees and other insects swarm about the tree while it is in flower. Because of its conspicuous bloom, this species is often called "flowering locust." The *fruit* is a pod, from 3 to 5 inches long, containing small hard seeds. Though they mature in the fall, the pods do not open until winter.

The brown *bark* is deeply furrowed, and covered by small square scales. The brittle twigs and branchlets are armed with stout, sharp spines. The yellow *wood* is heavy and strong, very hard, and exceedingly durable in contact with the soil. It is the preferred wood for posts and poles, and is also used for insulator pins, in ship-building, and turnery. It probably has other uses for which a very hard wood is desired. This is a valuable tree for planting on farms.

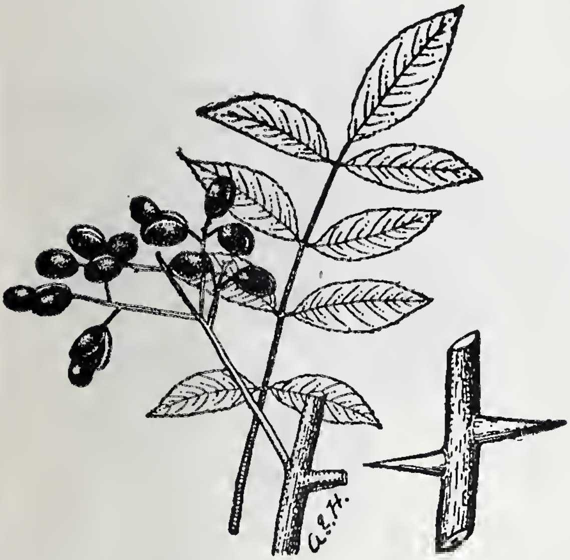


PRICKLY ASH

(Xanthoxylum clava-herculis L.)

(Ruta family.)

This shapely, pretty tree occurs in almost every part of Louisiana, but nowhere common. It is a small tree, seldom over 30 feet in height, with a short trunk usually under 1 foot in diameter. Seems to like a light sandy soil. Often found growing on bluffs near rivers.



The *leaves* are compound, 5 to 8 inches long, with 7 to 17 oval, toothed, bright-green leaflets.

The small, pale green *flowers* are borne in loose, branching clusters, and come in early spring, when the leaves are about half grown. The small *fruit* opens at maturity, and the seed hangs outside. The fruit ripens in early summer, and is eaten by birds and chickens.

The *bark* is the most characteristic feature of this tree. It is grey, and with numerous corky tubercles, sometimes 1 inch across at the base. The aromatic inner bark, with its strong juice which bites the tongue, has given this tree a number of local names, such as "tingle-tongue". With it children like to play tricks on the uninitiated. This same inner bark was a favorite in old-time home remedies, used for many things, from a general tonic to a cure for snake-bite. It is still used in the South to relieve tooth-ache, which has given it another name, "Tooth-ache tree." The French people in Louisiana gave it the name of "Frene-piquant".

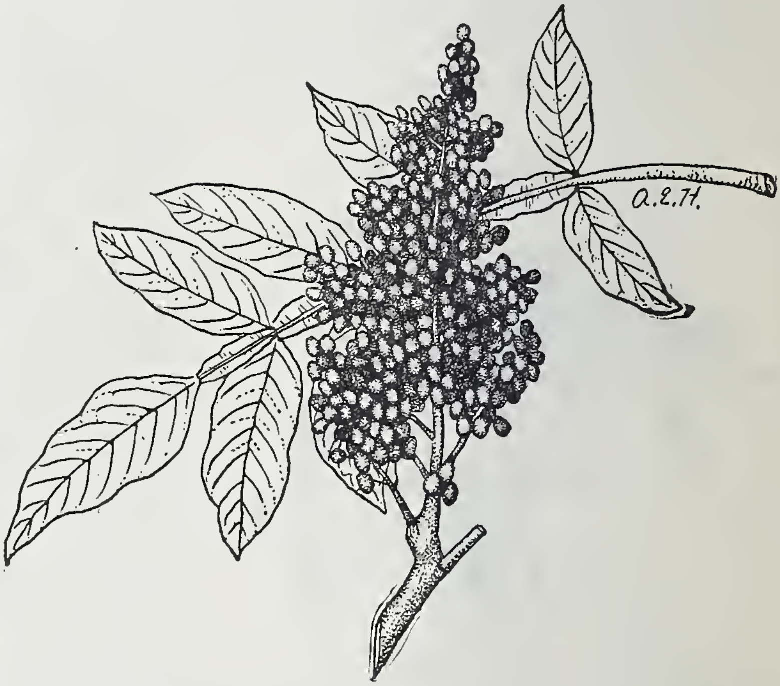
The soft, light-brown *wood* has no special known value.

SUMACH *(Rhus copallina* L.)

(Sumach family.)

Though it is not commonly known, the *rhus* family is a large and important one. To a species from China belongs the distinction of supplying a black varnish used in the manufacture of the beautiful Chinese and Japanese lacquers. From other species various products are obtained. The one named above occurs oftenest in shrub form, in clumps and thickets around the edges of fields and in other open places. After the leaves turn in the fall, they add a vivid note to the autumn coloring. They spread by means of shallow root-runners. Under favorable conditions, this species sometimes becomes a tree 30 feet high, with a trunk 10 inches in diameter .

The compound *leaves* are alternate, 6 to 8 inches long, with 9 to 21 small oval leaflets, glossy green above, downy beneath. In the fall they turn a brilliant crimson on the upper surface. This sumach is easily distinguished from others by the fact that the leaf-stem is winged. The leaves are rich in tannin, and are used in large quantities for curing leather, and in the manufacture of dyes.



The tiny, pale-green *flowers* are borne in pyramidal heads, and come in July. Male and female flowers are borne on separate trees. The small *fruit* is red, covered with short hairs, very acid, and is borne in compact panicles. After frost falls, they turn black, and the heads droop. The berries cling, and are eaten by birds in late winter.

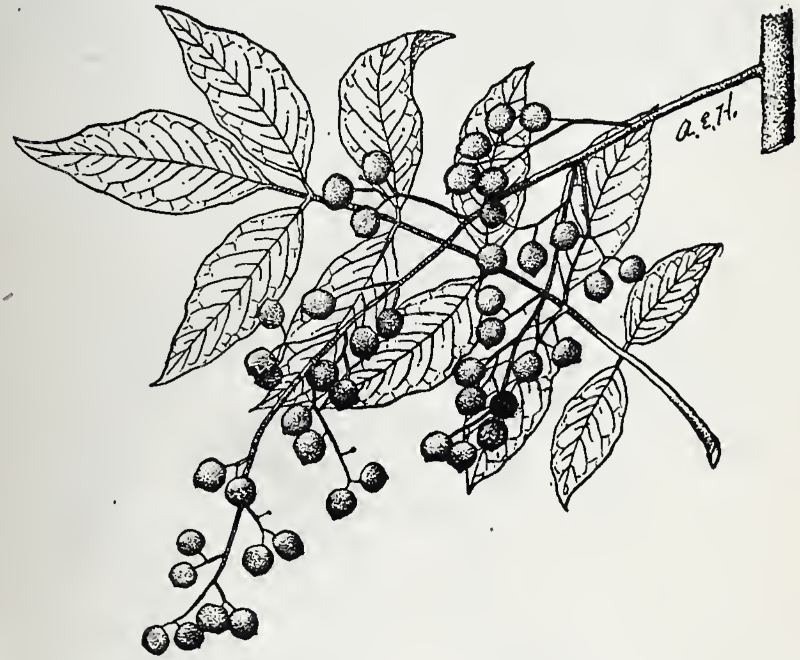
The *bark* is quite characteristic. It is almost smooth, with horizontal splashes of light and dark grey, and many small excrescences. This papery outer bark cracks at irregular intervals, exposing spots of reddish-brown beneath. The reddish-brown *wood* is soft, light, and coarse-grained.

A shrub, *rhus glabra,* often called ''white sumach'', is really more ornamental than the above. The low plants bear profusely, the upright heads of berries remaining bright red all winter, and contrasting beautifully with the smooth, white stems.

POISON SUMACH *(Rhus vernix* L.)

(Sumach family.)

This beautiful plant is one to be admired from afar, as it is the most dangerous of our native trees. To persons very sensitive to vegetable poisoning, only a slight contact with the leaves is sufficient to cause a severe eruption. Children are oftenest affected; sometimes their faces will swell until their eyes are closed for several days. Every person who tramps the woods should learn to instantly identify this tree. It is abundant about the heads of small streams in the hills, where it is most often a shrub. Its autumn coloring is vivid and beautiful.



The compound, alternate *leaves* are quite different from those of other sumachs, shaped more like those of ash; from which fact it is often called "poison ash." Here is a feature to be remembered; the leaf-stems are always red, usually quite conspicuous. The leaves are 7 to 14 inches long, with 7 to 13 oval leaflets, much larger than those of other sumachs, 3 to 4 inches long. The *leaves* are bright green above, paler beneath, usually with a red mid-rib.

The small *flowers* are borne in panicles much less compact than those of other sumachs, and the *fruit* is a lustrous white berry, borne in slender, drooping panicles. The fruit matures in September.

The *bark* is very smooth, light grey or tan.

An infusion of the leaves and young branches is employed in homeopathic practice; and from the juice is made a black, lustrous, durable varnish, similar to that obtained from the Chinese species.

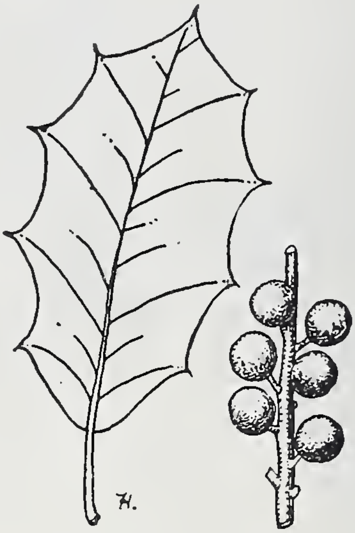
This species grows only in low, rich, wet grounds, while other sumachs are nearly always found on dry uplands.

HOLLY

(Ilex opaca Ait.)

(Holly family.)

With its glossy foliage and brilliant berries, this is one of our most attractive trees, certainly our finest evergreen. It occurs over the state, adding much to the beauty and brightness of our winter woods. But the berry-bearing trees are so much sought for Christmas decorations, they are threatened with extinction. The tree is shapely, usually 40 to 50 feet high and 6 to 10 inches in diameter, but occasionaly as much as 100 feet high, and 2 feet in diameter.



The *leaves* are simple, alternate, 2 to 4 inches long and armed with sharp spines. They are thick and glossy, and persist for about three years.

The *flowers* are very small, white. The male and female flowers are borne on separate trees, which is unfortunate, as the trees with berries are much more attractive. The *fruit* is a scarlet berry, and is borne in close clusters. Clings until spring.

The *bark* is light grey, mottled, smooth, with occasional wart-like excrescences on old trees. The *wood* is light, tough, close-grained, not strong, and white. It is valuable for use in cabinet work, interior finish, and in turnery. It is used for the white portion of inlay work on fancy boxes. Many of the largest, finest trees have been cut for the market.

It does well in cultivation when once established, but is difficult to transplant.

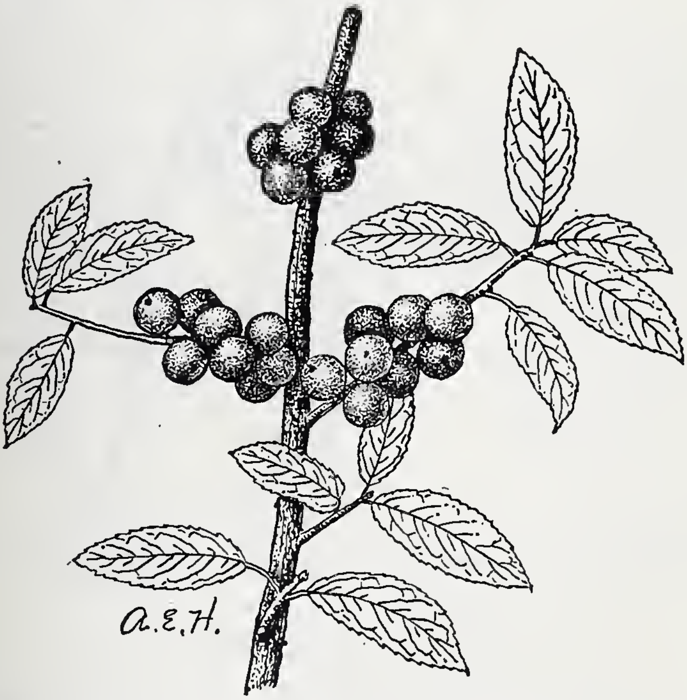
YAUPON (Cassena Berry)

(Ilex vomitoria Ait.)

(Holly family.)

This little cousin of the big holly is most accomodating, as it will become a tree or a shrub, just as desired. With its masses of tiny, evergreen leaves and beautiful berries, it is a most desirable hedge plant. It grows rather slowly but is long-lived, and when established is practically permanent. Planted singly and allowed to grow upright, it makes a shapely little tree, sometimes 25 feet tall, with a trunk 6 inches in diameter. It grows naturally in the rich soil of flats and slopes in the vicinity of streams, but is very adaptable, and will thrive almost anywhere.

In spring the Indians used to come to the Gulf states in great numbers to drink a tea made from the leaves of this tree.



The little *leaves* are from ½ to 1½ inches long, lustrous green above, paler beneath, and cling for two or three years. An infusion made from the leaves is emetic and purgative.

It is unfortunate that the male and female *flowers* are borne on separate plants, as of course the male has no berries. The *fruit* is a glistening, scarlet berry, borne in profusion, close to the stem, and clings until spring. Branches of it are sometimes sold for Christmas greens, but it does not last unless the stems are placed in water.

The *bark* is rather like that of other hollies, with thin, small scales on old trunks. The cream-colored *wood* is hard and close-grained.

This tree, or shrub, deserves to be planted in every park and garden, and along streets and highways.

WINTERBERRY

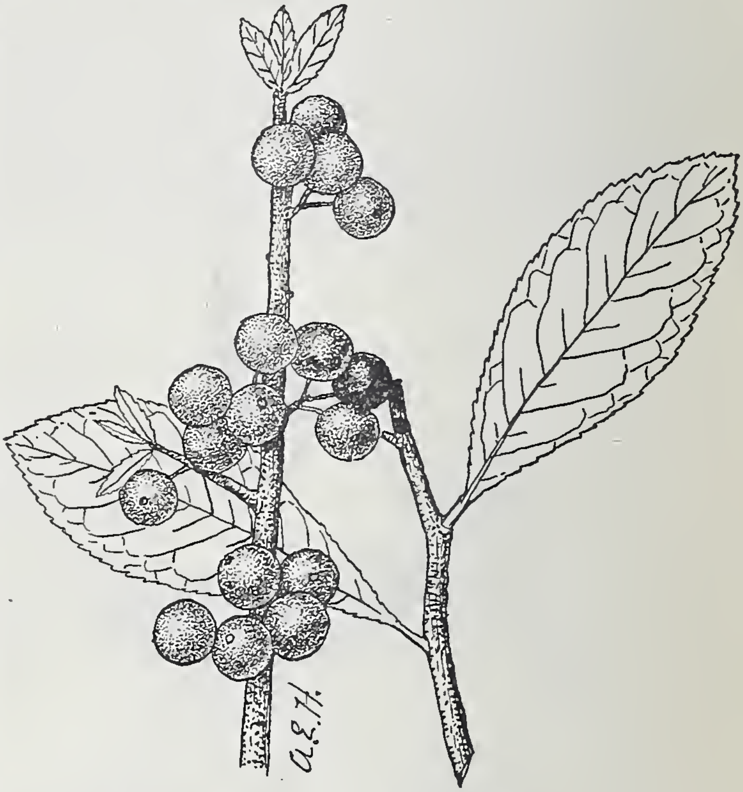
(*Ilex decidua* Walt.) (Holly family.)

The term, "deciduous holly", sounds impossible, but we have two in Louisiana, both charming. Winterberry is a tall shrub or tree, sometimes 30 feet in height, with a trunk 6 to 8 inches in diameter. It grows in rich swamp land over the state, and lights the winter woods with its blaze of berries. It is sometimes cultivated, and is very effective planted with dark evergreens.

The *leaves* are longer than those of yaupon, lighter green, and duller.

The male and female *flowers* occur on separate trees, as do those of all the hollies. The *fruit* is a bright-red berry, larger, more opaque, and less shiny than that of yaupon.

The young *bark* is light and smooth, with rough excrescences when old. The *wood* is like that of other hollies.



MOUNTAIN HOLLY

(*Ilex montana* T. and G. formerly *Ilex monticola* Gray.)

This species is less like holly to the casual observer, than any of the family, only the bark being characteristic. The stems are very slender and graceful, with none of the stiffness of other hollies. Though usually a shrub it sometimes becomes a tree 25 feet high, with a slender trunk 6 inches in diameter. It grows on loamy slopes in the sand hills. It is rare and little known, but has been positively identified in Winn, Natchitoches, and West Feliciana Parishes. It probably occurs in others.

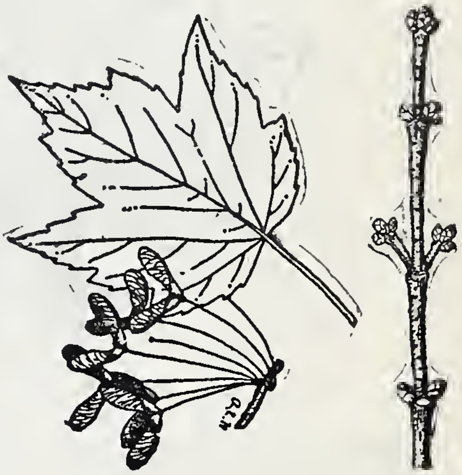
The thin, light-green *leaves* are serrate, sharp-pointed, and resemble those of sloe. They fall early, the better displaying the beautiful, large, translucent red *fruit*. These berries do not cling as long as those of other species, but the drooping sprays are exquisite while they last.

RED MAPLE

(*Acer rubrum* L.)

(Maple family.)

This charming, quick-growing tree is seldom planted for ornament, though it does very well in cultivation. It is not long-lived, and does not grow large, seldom with a trunk more than 18 inches in diameter, though tall and slender in proportion. It is beautiful, and easily identified the year round. It occurs over the state.



The *leaves* are 2 to 5 inches long, with 3 to 5 pointed, toothed lobes, light green above, whitish below. They turn red, yellow, and orange in the fall, each maple tree becoming a delicate flame in the woods.

The *flowers,* in small, dense clusters, appear in January or early in February, their bright red the first color to appear in the woods. The *fruit* is a winged seed, borne in pairs, and usually bright red, turning gradually to green, then brown. They are borne on slender, drooping stems, also red. Fruit matures in spring.

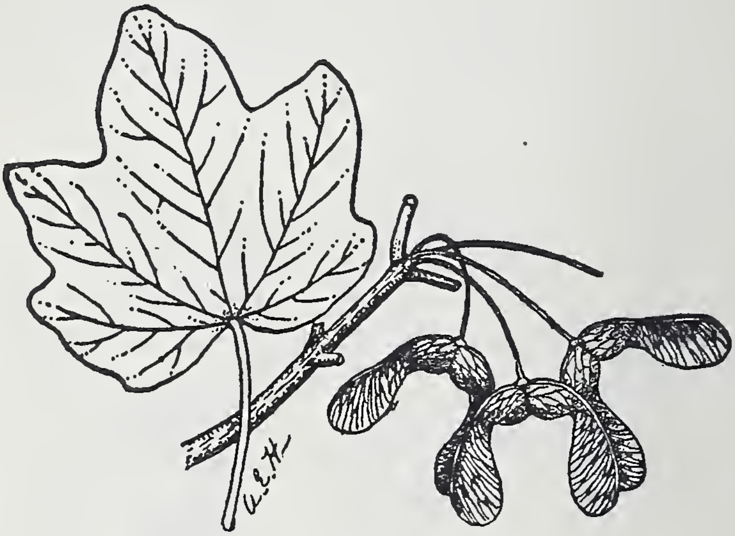
The tree may be identified by its *bark,* which is beautifully dappled in white, light green, and several shades of grey. On very old trunks, the bark is brown, and broken by shallow fissures. The *wood* is heavy, close-grained, not strong, light reddish-brown, with thick, lighter-colored sapwood. It is used in the manufacture of furniture, wooden-ware, gun-stocks, and in turnery.

There are in the state two other varieties of red maple besides the type. These are: *Acer rubrum tridens,* common in the hills of North Louisiana, with leaves less serrate than the type; and *Acer rubrum drummondii,* which grows in the Mississippi bottom, in vicinity of New Orleans. The latter variety has a much larger fruit, and of a more brilliant red than any other. The flowers and fruit of this tree are conspicuous in the late winter landscape.

SOUTHERN SUGAR MAPLE

(*Acer floridanum* Pax.)
(Maple family.)

This pretty maple grows along the banks of streams, and on adjacent low hillsides, in several parts of the state. Rare in East Louisiana, more abundant in the central and western portions. Usually a low tree, it is sometimes 60 feet high, with a trunk 2 feet in diameter. It is of attractive spreading habit, and makes a very satisfactory shade tree. It closely resembles the sugar maple of the North.



The *leaves* are opposite, with 3 to 5 lobes, thin, bright green above, downy below, from 1½ to 3 inches in diameter. They turn yellow and scarlet before falling in the fall.

The tiny green *flowers* come before the leaves, or with their unfolding, and are borne in dainty, drooping clusters. The *fruit* is green, borne in pairs, with the usual maple wings, turning light reddish-brown in late spring when it matures.

The *bark* on young trees is thin, greyish-brown; on old trunks becoming much darker, and deeply furrowed. The *wood* is light-brown, heavy and hard, similar to that of the northern sugar maple.

Acer saccharum, the true sugar maple, is occasionally found in Louisiana, but is rare.

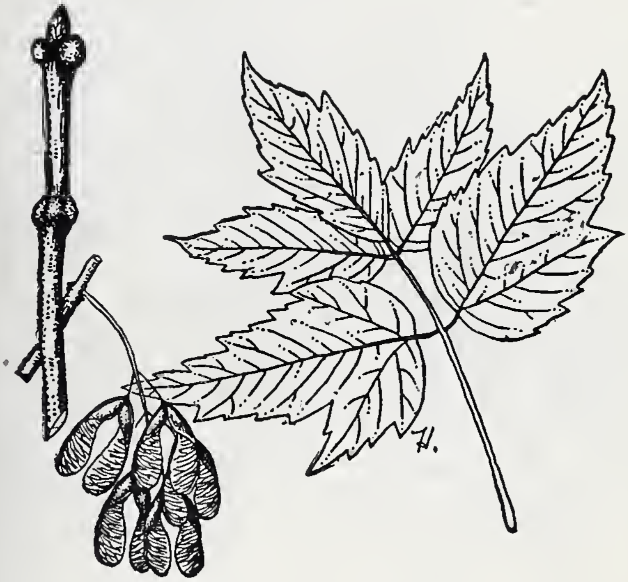
Another pretty maple, which is usually rare, but plentiful in Natchitoches and Sabine Parishes, is *Acer leucoderme.* It is a pretty spreading tree, seldom over 25 feet high. The leaves are similar to those of *floridanum,* but the lobes are more pointed. The leaves turn bright scarlet in autumn, unless in dense shade, in which case they turn a clear yellow. This tree probably occurs in other parishes beside the two named. It is a charming tree, and deserves to be planted for ornament.

BOX-ELDER (Ash-Leaved Maple)

(Acer negundo L.)

(Maple family.)

Of all our Louisiana maples, this one is most often planted for shade and ornament, and in many respects it is the least satisfactory. It grows rapidly, making a quick shade, and is quite shapely. On the other hand, the leaves fall early, with none of the brilliant autumn coloring of the other maples; the branches are brittle and break easily; and the tree is short-lived and rather subject to disease. The tree occurs in deep, rich soil over the state, sometimes attaining a height of 60 feet, with a trunk 2 feet in diameter.



The *leaves* are opposite, compound, usually with 3 leaflets, rarely with 5 to 7. The leaflets are 2 to 4 inches long, coarsely and irregularly toothed, light green above, paler beneath.

The tiny *flowers* are borne in drooping clusters. The *fruit* is like that of the other maples, green, turning light tan when mature. Unlike the seeds of other maples, they cling until after the leaves are shed. The tree is at its prettiest when bearing its many graceful racemes of winged seed.

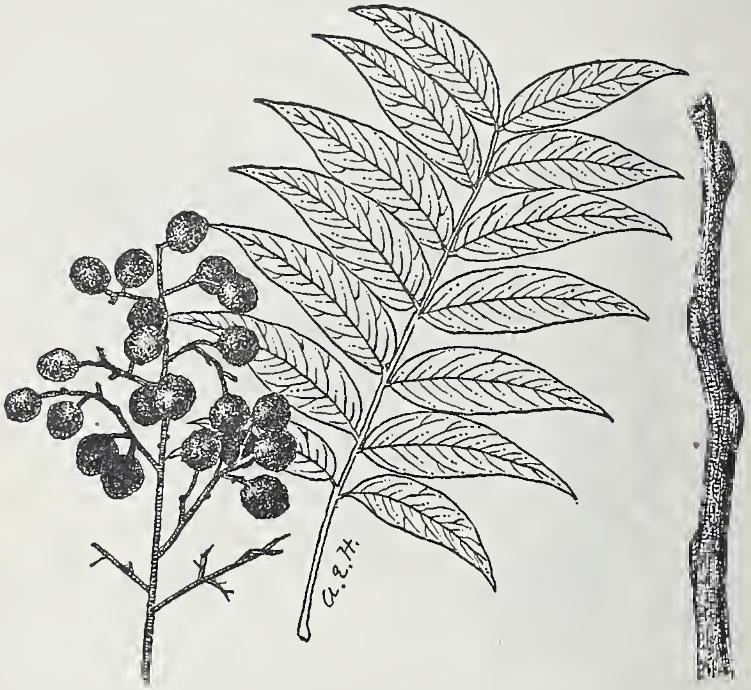
The *bark* of the twigs is green; of the trunk greyish-brown, divided into broad, rounded ridges, and separating on the surface into short, thick scales. The wood is light, soft and weak, but close-grained, and creamy-white. It is sometimes used in the manufacture of low grade furniture and interior finish; also for woodenware, cooperage, and paper pulp. (The wood has no commercial importance in Louisiana.)

WILD CHINA TREE (Soapberry)

(*Sapindus drummondii* Hook. and Arn.)

(Sapindus family.)

The very name, ''China-Tree'', suggests that it is an exotic, but three species are native to the United States. The one given above, while rather rare, occurs in several localities in the state. It is a shapely tree, seldom as much as 50 feet in height, with a trunk not usually over 1 foot in diameter. It occurs in rich river-bottoms. This must not be confused with the cultivated China-tree, which belongs to a different family.



The *leaves* are similar to those of the cultivated China-tree, compound, with 4 to 9 pairs of alternate, slender, sharp-pointed leaflets. The light-green leaves shed early in autumn.

The small, white *flowers,* appearing in May, are borne in clusters 6 to 9 inches long. The bright-yellow *fruit* ripens in September, but clings through the winter. The pulp of the berries will lather in water, and has been used as a substitute for soap. The family name, *sapindus,* is derived from this use of the first known species, and from the fact that it came from the West Indies.

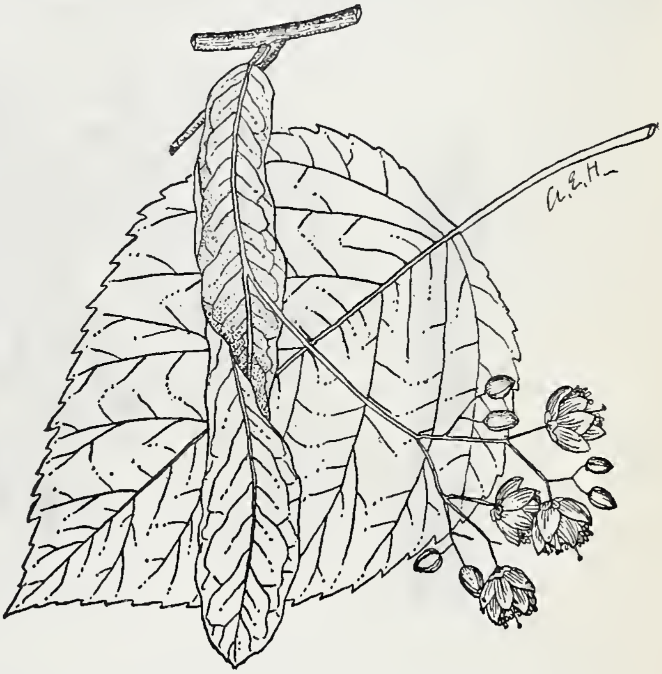
The *bark,* separating by deep fissures into long, narrow plates, is broken on the surface into small, brown scales. The inner bark is bitter and astringent, and is used in home-made tonics. The light-brown *wood* is heavy, strong, close-grained, and splits easily into thin strips. It has been used in the making of cotton-baskets and the frames for pack-saddles.

LINDEN

(*Tilia floridana* Small.)

(Linden family.)

This tree belongs to a large and well-known family, many species being planted for shade and street trees both in the United States and Europe. They are given several names; lin, linden, basswood, etc. They are shapely trees, with pretty leaves and sweet-scented flowers. When in bloom they attract swarms of bees, and the honey made from the flowers is unusually fine. As there are at least six species native to Louisiana, only two will be listed here.



Though nowhere plentiful, *T. Floridana* occurs here and there over a large part of the state.

The *leaves* have the family characteristic of being unequal at the base. They are 3 to 5 inches long, toothed, bright green above ,paler beneath.

The *flowers,* which come early in summer, are cream-colored, in close clusters borne on a long furry stem. In all lindens the flower-stem comes out from the middle of a long, narrow, false leaf. The *fruit* is round, hard, and furry, and borne in small clusters; ripens in August.

The *bark* is light grey-brown, close, only shallowly furrowed, giving an effect of smoothness.

LINDEN

(*Tilia caroliniana* Mill.)

This tree is nearly always taller and larger than the above. It may also be distinguished by its much larger leaves, which are more deeply toothed. On young shoots, the leaves are particularly large. The fruit is much smaller.

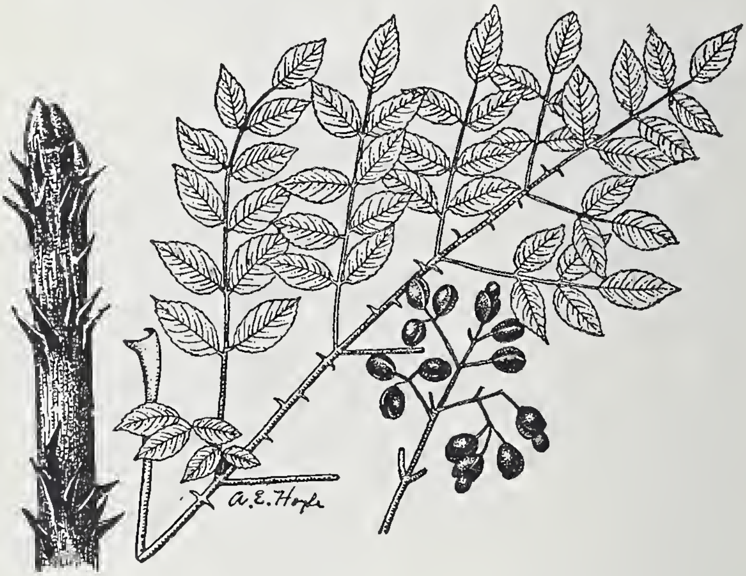
Under the name of basswood, the *wood* of the lindens is used in the manufacture of trunks, woodenware, cheap furniture, excelsior, and for wood carving, and paper-pulp. It is white, light, tough, and very soft.

HERCULES CLUB

(Aralia spinosa L.)

(Aralia family.)

If one has ever accidentally caught hold of the trunk, this tree will never be forgotten, for it is armed from the ground up with many sharp spines. This characteristic has given it many names, such as Devil's walking-stick, prickly elder, and prickly ash; but the last name properly belongs to another tree. It possesses beauty, however, to make up for its spitefulness. The tree is usually small, though occasionally it attains a height of 30 feet, the leaves forming a flat-topped, spreading crown. It is prettiest when a shrub.



The *leaves* are doubly compound, or pinnate, the main leaf-stem 3 to 4 feet long, clasping the stem with an enlarged base, and leaving conspicuous scars when they fall. The oval leaflets are toothed, pointed, dark green above and paler beneath. They turn yellow in autumn.

In mid-summer each plant bears one immense panicle of small, white *flowers,* which rises well above the leaves. The tree presents its most striking appearance in autumn when the small, black *fruit* ripens, for the fruit-stems turn a rich wine-red. Birds eat the juicy berries.

The brown *bark* is divided by broad shallow fissures into circular, horizontal ridges. But the tree may always be identified by its straight trunk, covered with sharp spines.

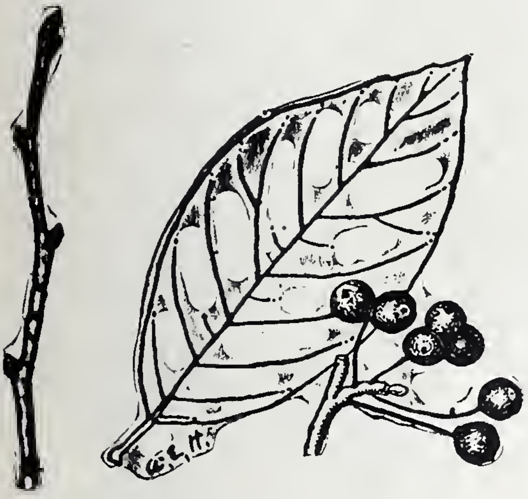
From the berries and the bark of the roots is extracted a stimulant sometimes used for medicinal purposes.

The tree is sometimes planted for ornament.

BLACK GUM

(*Nyssa sylvatica* Marsh.)
(Nyssa family.)

The tupelo family was named for a nymph, Nyssa, because some of these trees grow in water. Blackgum is a tall, slender tree which grows at the edge of swamps and on moist hillsides. When it grows in the open, it often forms a thin, flat-topped head. It sometimes becomes quite large, with a height of over a hundred feet, and a trunk occasionally more than 4 feet in diameter. In recent years, blackgum is being cultivated for its wonderful autumn coloring. It is a common tree over the state.



The oval *leaves,* which vary somewhat in shape, are 2 to 4 inches long (larger on young shoots), glossy green above, and paler beneath. In autumn they turn bright scarlet on the upper surface, remaining whitish beneath.

The tiny inconspicuous *flowers* come when the leaves are just grown. The male and female flowers are borne on separate trees. The *fruit* is dark blue, fleshy, about ½ an inch long, with one hard seed. Bird lovers should prize these trees, as "blackgum berries" cling all winter long, and are much appreciated by our feathered winter visitants. Robins, in particular, gather to feast on these berries.

The *bark* on young trees is shallowly furrowed in narrow, light-brown, corky ridges. On old trunks, it is deeply furrowed, and broken into blocky ridges, almost black. The *wood* is soft, but tough, cross-grained, hard to work, warps easily, and is not durable. It is used for rollers, mallets, ox-yokes, mine trams, box shooks, and for crate and basket veneers.

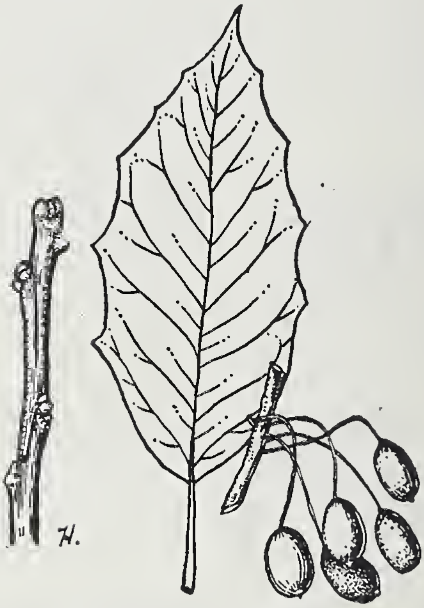
A small species of this family is *nyssa biflora* (Walt.) which grows around the edges of small overflow ponds. The slender trunk gradually tapers up from a much enlarged base. The leaves of this species are slenderer than those of the above.

TUPELO GUM

(Nyssa aquatica L.)

(Nyssa family.)

This species often grows in the water in cypress swamps. It is a tree 80 to 100 feet in height, with a trunk 3 or 4 feet in diameter and much enlarged at the base. (All trees which grow in water are enlarged at the base.) The horizontal branches are comparatively small, forming a narrow head.



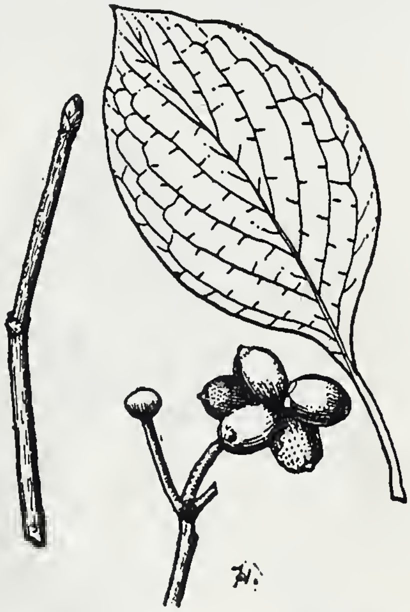
The *leaves* are oval, irregularly toothed, larger than those of blackgum, lustrous green on the upper surface, paler and downy beneath.

The *flowers* appear when the leaves are nearly grown, the pistillate borne singly, the staminate in small, dense clusters. The *fruit* is dark purple, much larger than that of the blackgum, about 1 inch long, with one flat hard seed.

The brown *bark* is longitudinally furrowed, and roughened on the surface by small scales. The *wood* is soft, weak, close-grained, exceedingly light, and difficult to split. It is used in the manufacture of wooden-ware, broom-handles, and fruit and vegetable boxes and crates. The wood of the roots is so very light it is sometimes used instead of cork to float fish-nets.

DOGWOOD *(Cornus florida* L.) (Dogwood family.)

This lovely tree, sometimes referred to as ‘‘flowering dogwood’’, occurs over the state, except in deep swamps. A small tree, seldom over 30 feet high and 10 inches in diameter ,it forms a flat, spreading crown. Attractive the year round, it should be planted extensively for ornament. However, it will not grow under unfavorable conditions. It must be planted in a well-drained soil, preferably sandy. As the roots are very shallow, the surface soil must not be allowed to pack and dry out, but should be kept well mulched. Unless our people are taught not to tear off branches of flowers and berries, this beautiful tree will soon disappear entirely from the woods adjacent to highways and popular camping places.



Leaf and berry ⅔ life size.

The *leaves* are opposite, ovate, 3 to 5 inches long, bright green above, and paler below. They color beautifully in the fall.

The flower-buds form in the fall, conspicuous little grey-green ‘‘buttons’’. In early spring, before the leaves come out, these unfold. The true *flowers* are greenish-yellow, and form a tight little cluster. This cluster is surrounded by four petal-like bracts, when they first unfold, small and yellowish-green, becoming large and snowy white. When in full bloom, the tree is a sheet of white, the most conspicuous feature of the spring landscape. The *fruit* is a shining, scarlet berry, which ripens in the fall. These berries are borne in close clusters, and add a charming touch to the winter landscape. They are very bitter, but are relished by many birds.

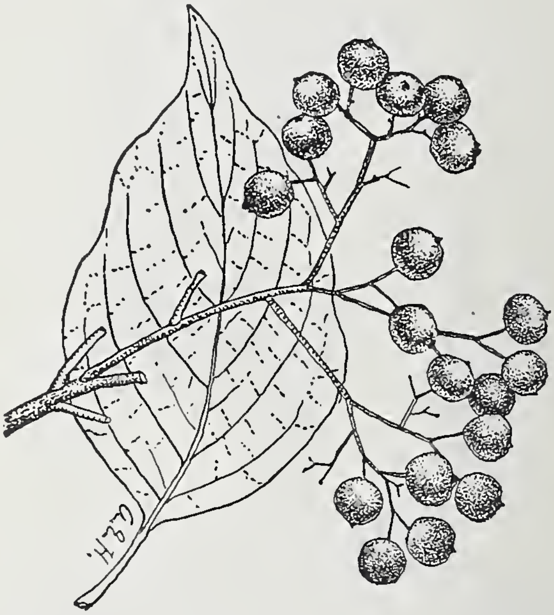
The *bark* is very dark, and is ‘‘checked’’ into four-sided, thin, small scales. The very bitter inner bark was used in old-time remedies as a substitute for quinine, and mixed with cherry bark in a remedy for jaundice. The *wood* is strong, heavy, very close-grained, exceedingly hard, and usually reddish-brown in color. It is quite similar to the heart-wood of persimmon. It is much in demand in the manufacture of cotton-mill machinery, turnery, and engraver’s blocks.

SWAMP DOGWOOD (Roughleaf Dogwood)

(*Cornus asperifolia* Michx.)

(Dogwood family.)

This is a pretty, small tree, found on bottom lands, or rich moist slopes. It is seldom over 25 feet in height, with a trunk usually not over 6 inches in diameter. It grows more luxuriantly as a shrub, in clumps with several stems. It occurs in some part of nearly every parish in the state.

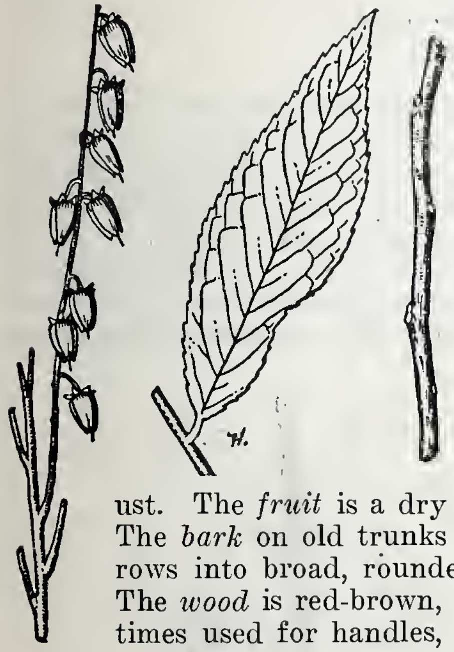


The oval, pointed *leaves* are opposite, dark green, and rather rough on both surfaces, particularly while young.

The small, cream-colored *flowers* are borne in small panicles, and come in late spring when the leaves are nearly grown. The *fruit,* ripening in autumn, is white, about ¼ inch in diameter, and borne in loose, red-stemmed clusters.

The brown *bark* is divided by shallow fissures into narrow broken ridges, with small, close scales on the surface. The brown *wood* is close-gained and hard.

SOURWOOD *(Oxydendrum arboreum* dc C.) (Heath family.)



This really beautiful tree seems to be little known, though it fully deserves to be planted for ornament. It occurs in almost every part of the state, but is nowhere common. It chooses a rich, but well-drained soil, on ridges and hillsides near streams. It is not a large tree, seldom over 50 feet high, with a straight trunk, not often more than 1 foot in diameter. In winter, the stiff, smooth twigs are very characteristic, as they turn a rich red at this time.

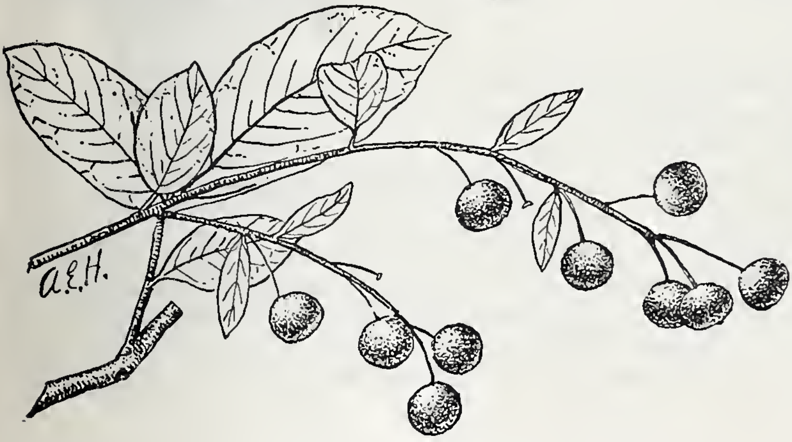
The *leaves* are alternate, 2 to 6 inches long, acid to the taste, glossy green above, paler below, the under surface quite hairy when they are young. They turn bright scarlet in the fall, the first leaves to take on their autumn coloring.

The *flowers* are exquisite, strikingly like sprays of lily-of-the-valley, cream-white and sweet-scented. They come at an unusual time, late July or early August. The *fruit* is a dry capsule, containing numerous small seeds. The *bark* on old trunks is grey, and divided by longitudinal furrows into broad, rounded ridges covered with thick, small scales. The *wood* is red-brown, hard, and very close-grained, and is sometimes used for handles, turnery, etc.

SPARKLEBERRY (Winter Huckleberry)

(Vaccinium arboreum Marsh.) (Heath family.)

Usually a shrub, this huckleberry sometimes becomes a small tree, rounded and shapely. It is seldom over 20 feet high, with trunk 6 to 8 inches in diameter. The trunk is often quite crooked. It is very common on moist, sandy soil over the state.



The small, oval *leaves* are glossy green.

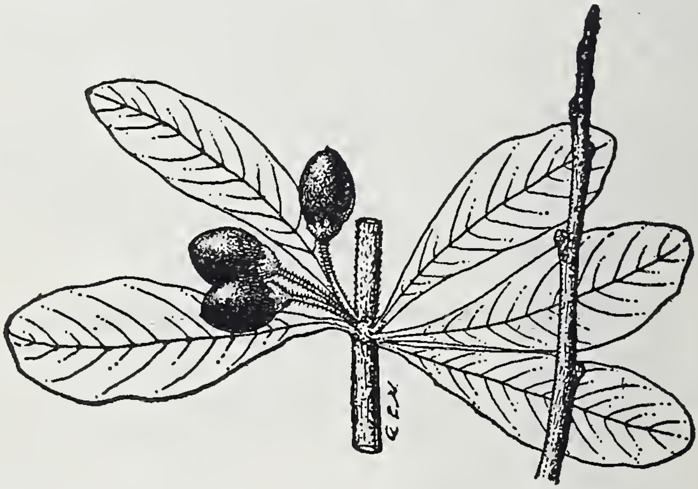
The dainty little *flowers* appear after the leaves are grown. They are tiny white cups, borne in small racemes, and are delicately fragrant. The greyish-brown *bark* is almost smooth, with a few narrow, thin, loose, scales. The hard, very close-grained, brown *wood* is sometimes used for handles.

BUCKTHORN

(*Bumelia lanuginosa* Pers.)

(Sapota family.)

This rather odd tree occurs on sandy land over the state, but is nowhere common. It is usually a small tree, seldom over 40 feet in height, or with a trunk more than 1 foot in diameter. It is usually straight and slender, with a narrow, round-topped head. The tree is sometimes known as chittim-wood; also, gum elastic. It is given the latter name from the clear, viscid gum which exudes when the tree is cut. It belongs to the same family as the tropical tree from which gutta-percha is obtained. Some of the tropical members of the family also produce edible fruits, such as the *sapota.*



The oblong-obovate *leaves* are from 1 to 2½ inches long, smooth and dark green above, somewhat furry beneath.

The small white *flowers* are borne in clusters, and appear in early summer. The *fruit* is black, fleshy, about ½ inch long, and with one seed. The fruit is borne singly, or in clusters of 2 or 3.

The *bark* is light-brown, broken into very narrow ridges, which, in turn, divide into small, close scales. Once the bark is observed closely, it is easily recognized when seen again. The *wood* is yellow, not strong, and has no known commercial value.

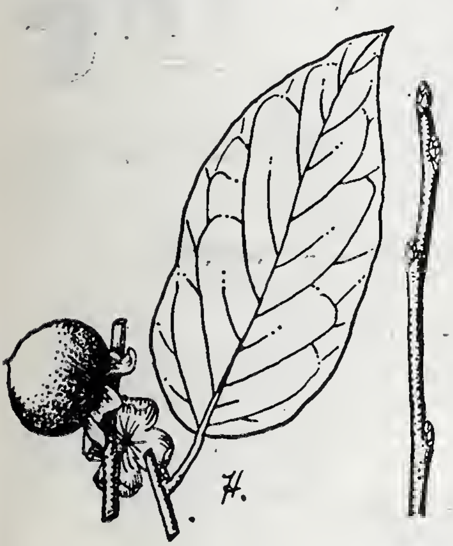
The tree has occasional long, curved spines, which often become leafy branchlets.

PERSIMMON

(Diospyros viriginiana L.)

(Ebony family.)

This tree is so well known in the South that it scarcely needs description. It grows everywhere, on almost every kind of soil, but seems to prefer open spots, such as old fields. They sometimes take possession of these, forming thick groves. In such cases they are usually small, not over 40 feet in height, and 6 to 10 inches in diameter. In good soil, in the forest, they sometimes attain a height of 100 feet, with a diameter of 2 feet.



The oval *leaves* are alternate, 4 to 6 inches long, dark green above, and paler beneath.

The *flowers,* which come in early May, are stiff, creamy little bells, and the male and female flowers occur on separate trees. They are fragrant, and are visited by the bees and many other insects. The *fruit* is round, orange-colored when not fully ripe, and purplish-red, or brownish-red after frost. In this last stage, it is quite palatable. The seeds are large, flat, and shiny-brown. The fruit varies much in size, flavor, and time of ripening. As a rule, the larger sorts ripen early, and are quite delicious by early September. The smaller ones are usually not edible until touched by frost. When not fully ripe, the persimmon is acrid and draws the mouth, and has given rise to many jokes. Many animals eat the fruit greedily. The negroes always say that "when the 'simmons get ripe the 'possums get fat."

The *bark* on older trees is almost black, and checks off in small, thick, almost square blocks. In very old trees, the small heart is almost black, very hard, dense, and strong, and this *wood* is much sought for shuttles and golf-stick heads; also used in turnery and for a few other purposes. The thick sapwood is cream-colored.

SILVERBELL

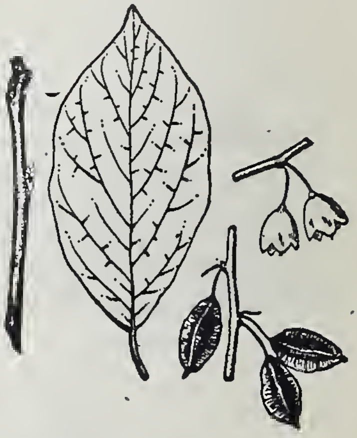
(*Halesia diptera* Ellis. formerly *Mohrodendron dipterum* Britt.)
(Storax family.)

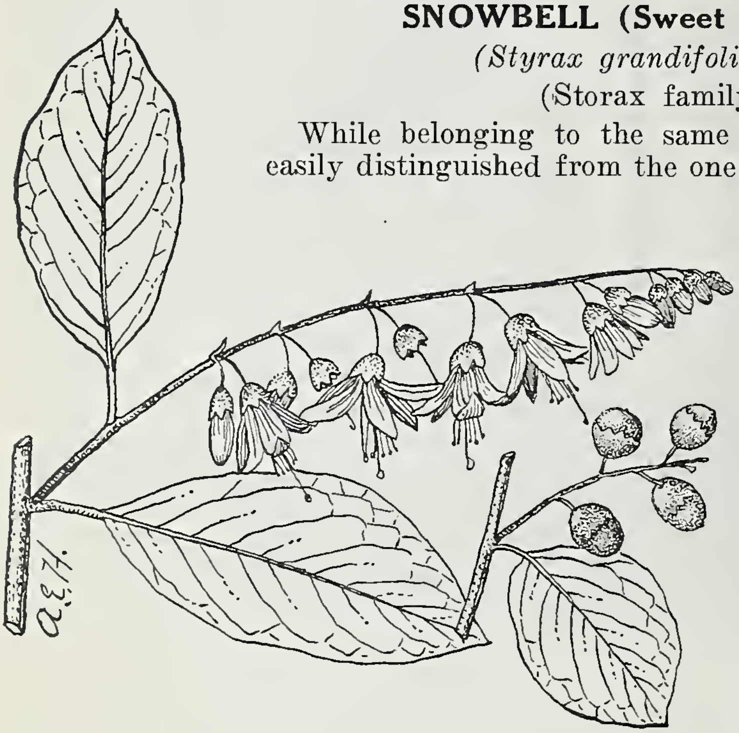
From a European member of this family are obtained storax and benzoin, aromatic, resinous balsams of commerce.

Silverbell is often a shrub, but also becomes a small tree, sometimes as much as 40 feet in height, with a trunk 6 to 10 inches in diameter. It occurs in rich, wet woods, but is most adaptable, and will grow almost anywhere.

The alternate, oval *leaves* are bright green above, paler and downy beneath, 3 to 5 inches long, much larger on young shoots.

The white *flowers* come before the leaves and are borne in clusters of 3 to 5. The tree is charming when thickly hung with its "silver bells". The *fruit* is about 2 inches long, with two wide thin wings, and two narrow ones in between. The *bark* of the trunk is brown, divided by irregular fissures, and separating on the surface into thin scales. For winter identification; the bark on the twigs forms long, loose, brown fibers.





SNOWBELL (Sweet Silverbell)

(*Styrax grandifolia* Ait.)
(Storax family.)

While belonging to the same family, this plant is easily distinguished from the one above.

The *leaves* are 3 to 5 inches long, usually obovate, bright green above, paler and furry beneath.

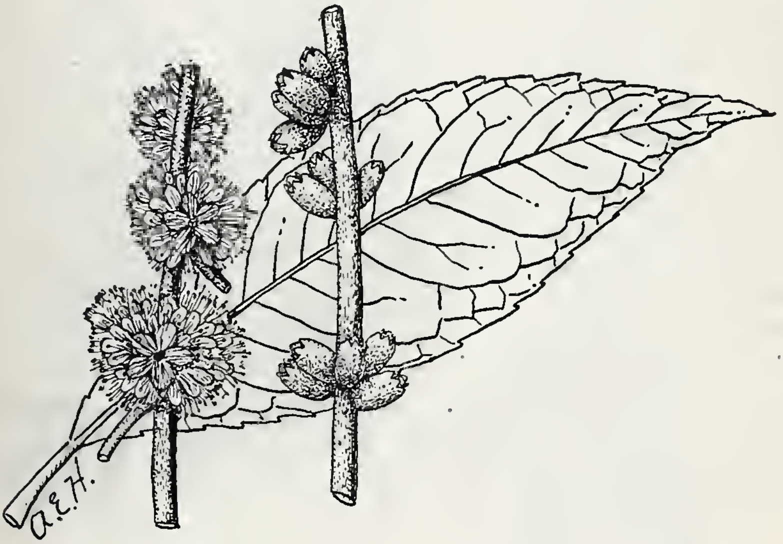
The *flowers*, which come when the leaves are nearly grown, are borne in dainty sprays, white with yellow anthers, the five petals recurving. They are fragrant, and resemble orange blossoms. . The *fruit* is round, hard, and furry, several in a cluster. Both of the above small trees are attractive, and thrive under cultivation.

SWEET-LEAF (Horse-Sugar)

(*Symplocos tinctoria* L'Her.)

(Symplocos family.)

This small tree is evergreen in the Gulf states. It is seldom over 25 feet high, with a short trunk 6 to 8 inches in diameter. It occurs here and there in moist, rich woods over the state. Both the bark and leaves yield a bright yellow dye, which was much used at home during olden times. The bitter, aromatic roots are sometimes used as a tonic. The leaves have a decidedly sweet taste, and are eaten greedily by stock.



The oblong, pointed *leaves* are 5 to 7 inches long, alternate, glossy dark green on the upper surface, paler beneath. They fall in late spring, after the new leaves have come.

The light-yellow *flowers,* which appear while the tree is bare, are borne in close clusters at intervals along the stem. The *fruit* is ovoid, orange-brown, about ¼ inch long, and ripens in early autumn.

The *bark* is greyish-brown, almost smooth, divided by occasional narrow fissures, and with occasional wart-like excrescences. The reddish-brown *wood* is light, soft, and close-grained.

WHITE ASH

(*Fraxinus americana* L.)

(Olive family.)

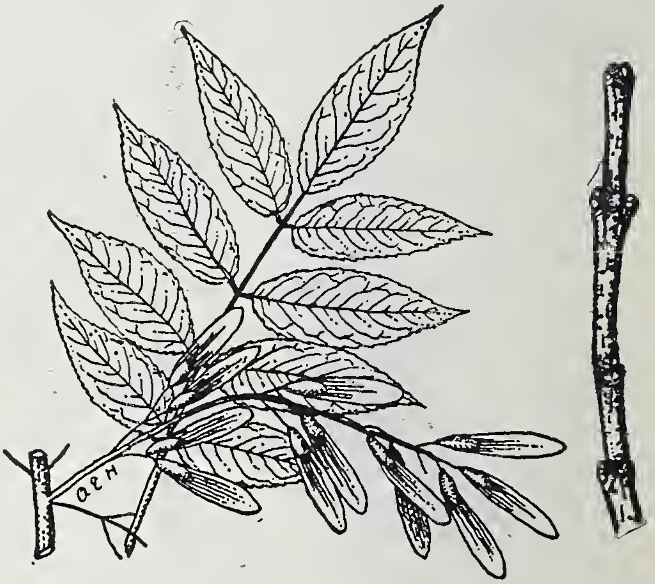
Oleaceae, or the olive family, is a large and important group. The famous olive tree of the Mediterranean basin belongs to this family; also the lilacs, forsythia, the privets and the jasmines, favorite garden plants in all temperate climates.

Our well-known white ash is common on rich hillsides and creek bottoms over Louisiana. In the forest, it is tall and slender, with a long, clean trunk. In the open, it makes a handsome, broad-crowned tree, with a trunk sometimes 5 feet in diameter. It is often over 100 feet in height, branching.

The ash tree takes a prominent place in the legends of several nations.

The compound *leaves* are 8 to 12 inches long, with 5to 9 leaflets (usually 7); leaflets oval, pointed, thin, dark green above, paler below. In autumn the coloring varies; on some trees a dull purple, on others a clear yellow.

The inconspicuous *flowers,* which come before the leaves, are borne in small close clusters, the male and female on separate trees. The *fruit* has a narrow flat wing, from 1 to 2 inches long. The fruit is borne in slender, drooping clusters, and ripens in late spring.



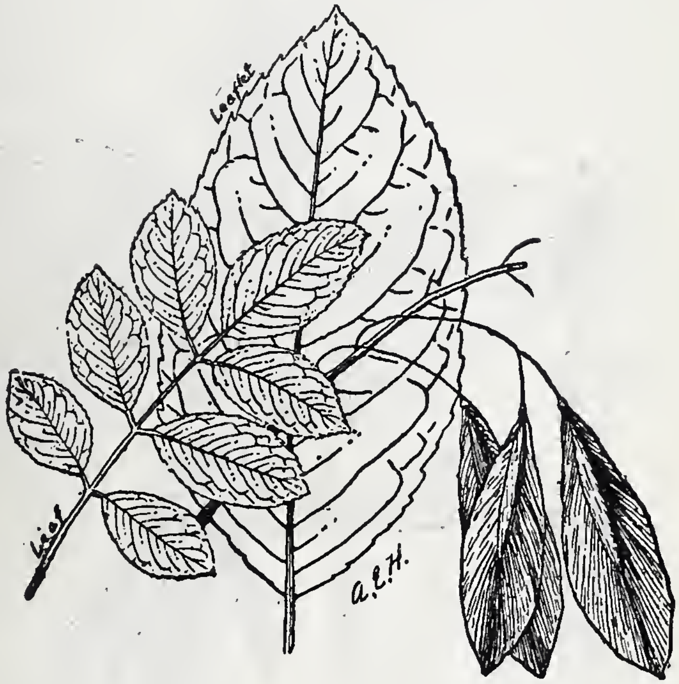
The pretty greyish-brown *bark* is divided by narrow fissures in a very regular diamond pattern, separating on the surface into small, thick scales. The *wood* is hard, strong, tough, close-grained, with brown heart, and thick, cream-colored sap-wood. It is used in the manufacture of argicultural implements, handles of tools, furniture, oars, tennis rackets, ball bats, and for interior finish.

It is a very valuable forest tree, and is also occasionally planted for shade and ornament.

WATER ASH

(*Fraxinus caroliniana* Mill.)
(Olive family.)

It is quite easy to distinguish this tree from white ash by the shorter, more rounded leaves, and by the three-winged seeds. Also, it is a small tree, seldom over 40 feet in height, and grows, usually, in deep swamps where water often stands a part of the year. It is abundant in these localities.



The compound *leaves* are from 7 to 12 inches long, with 5 to 7 broadly oval leaflets, dark green and usually toothed.

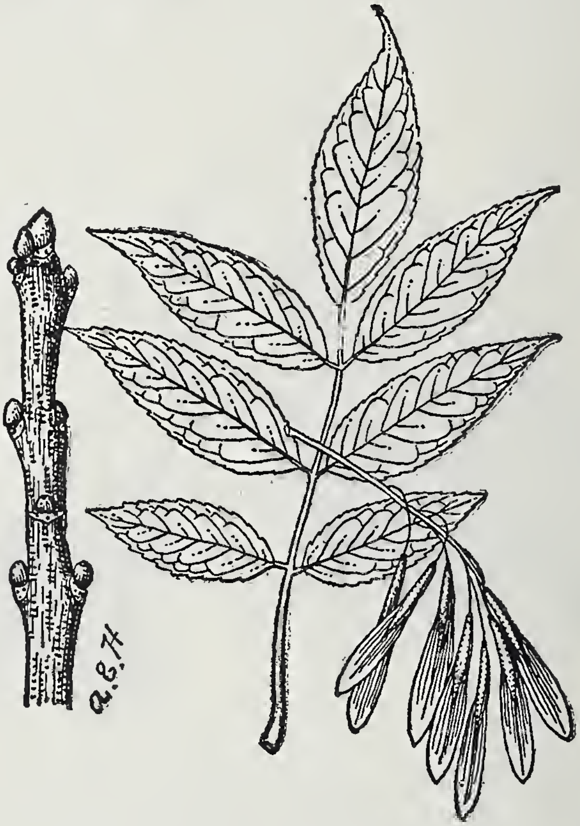
The tiny *flowers* appear before the leaves, the male in tight clusters, the female in an open cluster, the two on separate trees. The *fruit* has three wings, surrounding a hard body containing the seed.

The *bark* is light grey, more or less marked by irregular, round patches, and separating on the surface into small, thin, close scales. The white wood is close-grained, but soft and weak, and has little commercial value.

GREEN ASH

(Fraxinus pennsylvanica lanceolata Sarg.)

This tree may be distinguished by its slender, rather pointed leaflets, bright lustrous green on both surfaces. It occurs in deep rich soil over the state. It is a shapely tree, seldom over 60 feet high, or with a trunk more than 1½ feet in diameter.



The wings of the seeds are very narrow, long, flat, and thin. They mature in June.

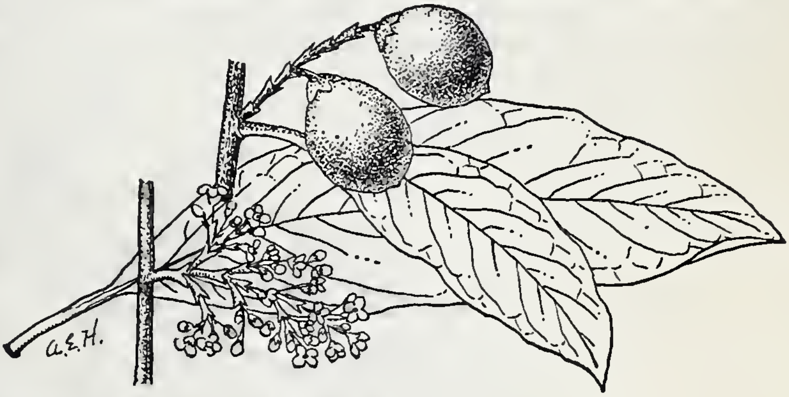
This tree is often planted for shade, and makes a rather satisfactory street tree. As a forest tree, however, it is not nearly so valuable as white ash.

DEVIL WOOD

(Osmanthus americanus B. and H.)

(Olive family.)

It does not seem quite fair that such an attractive tree should be named for its difficult wood. It is closely related to the delightfully fragrant "sweet olive" of old-time southern gardens. It is a common tree in the south-eastern part of Louisiana, near the borders of streams and ponds. It is evergreen. It sometimes becomes a tree 60 feet in height, with a trunk 1 foot in diameter.



The oblong *leaves* are opposite, 4 to 6 inches long, lustrous, bright green.

The inconspicuous *flowers* come in March, male and female on separate trees. The oblong *fruit* is about 1 inch long, dark blue, and ripens in early autumn.

The grey *bark* is roughened by small, thick scales, which fall, displaying the red-brown inner bark. The *wood* is heavy, hard, strong, and extremely difficult to work.

SWAMP PRIVET

(Forestiera acuminata Poiret.)

(Olive family.)

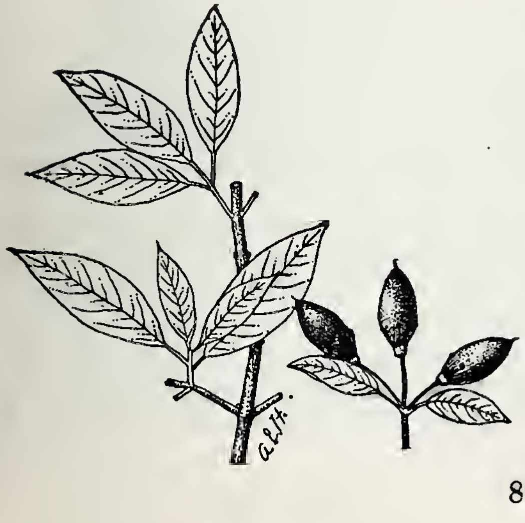
Usually a very low, spreading tree, swamp privet occasionally becomes a tree 40 feet high, with a trunk 6 to 8 inches in diameter. It grows in rich river-bottom lands.

It is occasionally cultivated.

The *leaves* are widest in the middle, pointed at both ends, 2 to 4 inches long, opposite, light green. Deciduous.

The small yellow *flowers* come before the leaves, and are borne in tight clusters set at close intervals along the stem. The plant is most attractive when in flower. The odd, dark blue *fruit* is about 1 inch long It ripens and falls in mid-summer.

The *bark* is dark brown, ridged.

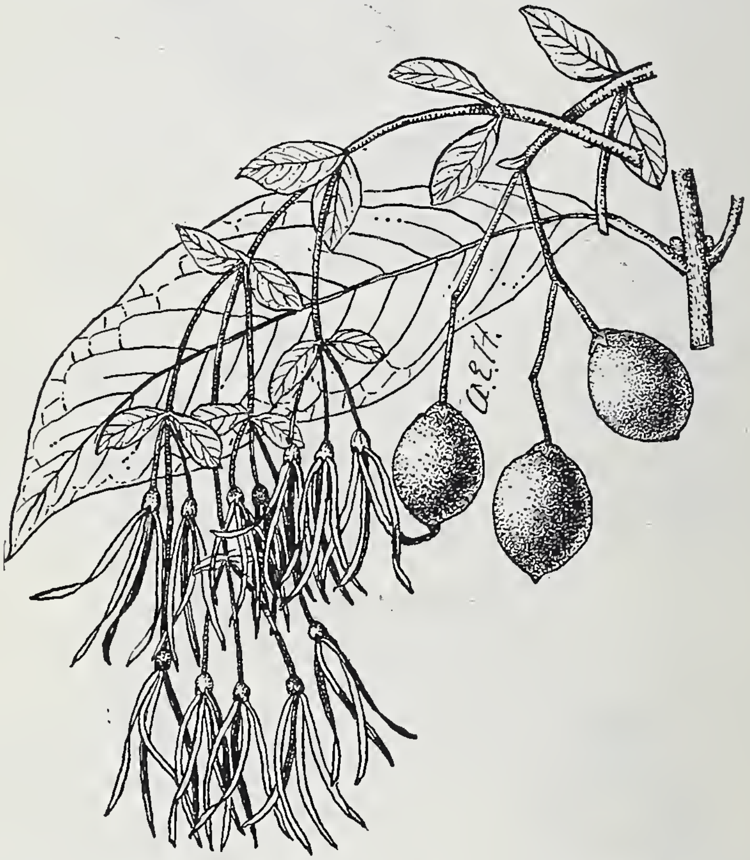


FRINGE TREE

(*Chionanthus virginica* L.)

(Olive family.)

Because of its drooping, fringy, white flowers, the children give this tree various names, such as ''Grancy-grey beard'', ''Old-man's-beard'', etc. In the open it forms a spreading tree, seldom over 20 feet high. It occurs in loamy soil over the state. Beautiful both in flower and fruit, it is a desirable tree for ornamental planting. It does well under cultivation.



The rather large, ovate *leaves* are 4 to 8 inches long, dark green on the upper surface, paler underneath, and turning a clear bright yellow in autumn. The leaves are opposite, and leave conspicuous scars when they fall.

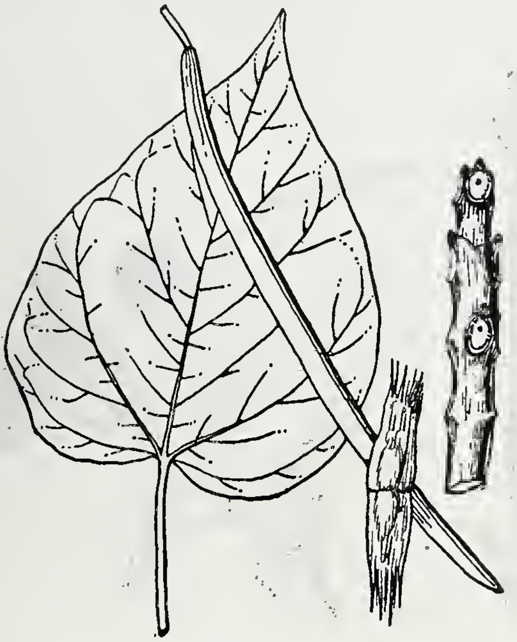
The odd, white *flowers,* which come with the very young leaves, are borne in long, loose, drooping panicles. The petals are very narrow and long, giving the effect of fringe. The *fruit* is a beautiful berry, sometimes as much as an inch long, dark blue with a glaucous bloom, and borne in loose, drooping panicles. The *bark* is similar to that of a young ash, but is rougher and has more white. The bark has tonic properties, and is used in domestic remedies. The bark of the roots is sometimes used as a tonic for horses.

CATALPA

(*Catalpa Speciosa* Englem.)

(Bignonia family.)

This tree is said to be an escape from cultivation in Louisiana, and not native to the state. However, it has become so widely naturalized as to seem to belong in a list of trees of the state. It is a native of other parts of the Mississippi Basin. It is quite adaptable, and will grow on almost any type of soil. It has been much planted for ornament, and has also been grown for fence-posts. It is usually a medium sized tree, seldom over 50 feet in height, with a trunk not often more than 1½ feet in diameter. In the forest it sometimes make a slender tree 100 feet high.



The *leaves* are heart-shaped, but sometimes rather long-pointed; bright green above, and downy beneath. They are sometimes as much as 10 inches long.

The *flowers*, which are very showy, come in late April. They are white, with purple calyx, and with two bands of yellow blotches across the lower lip; sometimes with purple spots on lower part of corolla. They are about two inches across, and borne in loose, few-flowered panicles. The *fruit* is a slender bean, about 10 to 20 inches long, and containing a number of seeds.

The *brown* bark is broken into thick scales. The *wood* is light, soft, coarse-grained, not strong, light brown, with thin, nearly white sap-wood. It is durable in contact with the soil, therefore used for fence posts, poles, and fence-rails. Also sometimes used for furniture and interior finish.

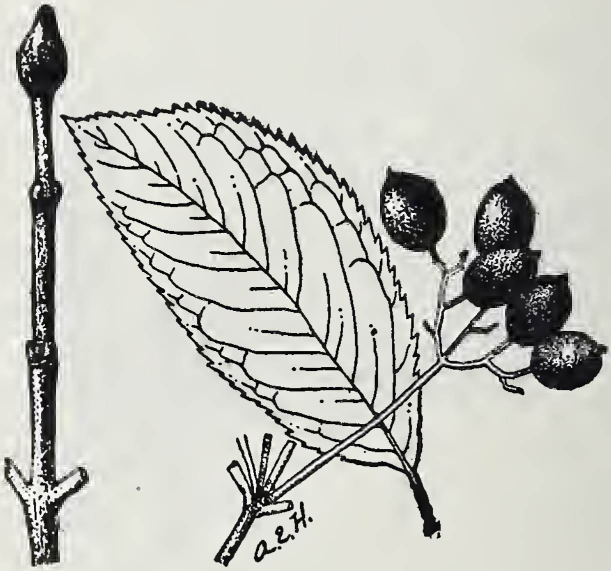
BLACKHAW

(*Virburnum rufidulum* Raf.)

(Virburnum family.)

This pretty, small tree is common on hillsides over the state. It is seldom over 30 feet high, with a trunk not often more than 10 inches in diameter, though occasionally more than a foot. In the open, in a favorable locality, it becomes a low, very shapely tree. It blooms and bears when only a shrub, and sometimes the branches droop almost to the ground with their burden of fruit. It supplies a favorite winter food for birds. With the many points in its favor, it is difficult to understand why this tree is not more often cultivated for ornament.

Though commonly called "blackhaw", this is not a true haw at all. The Louisiana-French name is "alisier".



The oval *leaves* are shining green above, paler below, usually about 3 inches long. They sometimes turn a deep, rose-red in autumn. The leaves are opposite, and leave conspicuous scars when they fall. In winter the tree may be easily identified by the stiff twigs, with these opposite leaf-scars, and the rather large, furry, brown winter-buds.

The small, creamy-white *flowers* are borne in showy panicles, and come after the leaves are almost grown. The *fruit* when ripe is deep blue, often with a bloom, and is borne in drooping, red-stemmed clusters, quite ornamental. On some trees the fruit is dry and husky, on others, sweet, pulpy, and good. The seeds are large, flat, and hard.

On old trunks the *bark* is almost black, and divided into narrow, rough, broken ridges. The inner bark is much used in medicines. The *wood* has no known commercial value.

TREE FRIENDS BROUGHT TO US FROM OTHER LANDS, OR FROM OTHER STATES IN OUR OWN COUNTRY

Ailanthus; *Ailanthus altissima.* Though it was brought from China, this tree has made itself so at home that one would now think it native. With its great circular heads of long, compound leaves, it is rather tropical looking, and quite attractive. It occurs in rich bottom-lands over the state. It is a rapid grower.

China-tree; *Melia azederack.* This tree, often called China-berry, or China-ball, has become naturalized in many parts of the state. A sub-species known as ''umbrella china'' has been developed, and is a popular shade tree. The latter grows very rapidly, forming a dense, round crown. It is a low-growing tree.

Camphor tree, *Cinnamomum camphorum,* belonging to the laurel family, and closely related to our own sassafras, is a favourite for planting in parks, on lawns, and along streets. It is a brilliant evergreen, which will stand quite a lot of cold, and with its glossy, oval leaves and dark-blue berries is attractive in any situation. The leaves when crushed have a characteristic aromatic odor. This tree is from China.

Lisgustrum. This large family of evergreen trees and shrubs is a popular one for planting in city parks. Almost everyone is familiar with the small-leafed privets used for hedges. Big-leaf privet *Ligustrum macrophyllum,* makes a low tree. A smaller but more attractive species is *L. lucidum,* with large glossy leaves, and heads of tiny white flowers. China and Japan gave us these plants.

Loquat, *Eriobotrya japonica,* another beautiful tree which Japan has given us, is being planted more and more in Louisiana. It is a showy evergreen, with shining green leaves 6 to 10 inches long, and makes a rounded low tree. The deliciously fragrant flowers come in December, and the edible, orange-colored ''plums'' ripen in April. With slight protection in extremely cold weather, it will grow anywhere in Louisiana.

Empress Tree, *Paulownia tomentosa,* another gift from Japan, has made itself very much at home, becoming naturalized in many localities. It is a handsome tree, somewhat resembling catalpa, except that the flowers are blue.

Palms. Of course this list would not be complete without a few of the picturesque palms that grace the streets and parks of New Orleans and other southern cities. One of the best-known, *Washingtonia filamentosa,* came originally from California. Old trees are sometimes 75 feet in height. The leaves are fan-shaped, with drooping filaments. A smaller tree, *Sabal palmetto,* came from Florida. It also has fan-shaped leaves, but without filaments. Canary Date Palm, *Phoenix canariensis,* is planted to some extent in the southern part of the state. It is a species of low, spreading habit, with beautiful long, frond-like leaves.

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